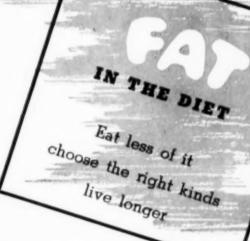
# Consumer

THE ORIGINAL CONSUMER INFORMATION MAGAZINE

# POWER LAWN MOWERS, ROTARY TYPE 6

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COMPLETE CONTENT

# IN THE DIET

Eating less of it, and choosing the right kinds, may lengthen your life

Want to avoid heart disease, which now causes close to three fifths of all deaths in the U. S.? Choosing the right foods and the right ways of cooking may save many lives and avert that desperate call for the doctor and the ambulance.

This article will tell you how you may lengthen your life and help to postpone the inevitable disabilities and weaknesses of old age.

WOULD YOU LIKE TO INCREASE GREATLY your chances of avoiding heart disease, which is today at the top of the list of dangerous, death-dealing maladies?

Twenty-five percent of all deaths in the United States are now due to atherosclerosis, the most common form of heart disease, which is characterized by deposits of fat-like material in the arteries. Altogether, diseases of the heart and of the circulatory system account for one to two thousand deaths a day or 60 percent of present deaths from all causes, and these diseases of the circulation have reached epidemic proportions. "Coronary disease has become the great problem of the day," a veteran English cardiologist wrote recently in the British Medical Journal.

#### Excess fat in the diet, and fats of the wrong kind

Degenerative heart disease is now seen to be closely related, not only to the consumption of fats in excessive amounts, but—and this is even more important—to the kinds of fats we consume. Particularly striking is the harm that has been done to our food supply by factory processes applied to natural fats. These processes are in universal use and are fully acceptable to all governmental health and welfare agencies.

Heart disease is a disease of "the abundant life," and it literally comes from "living off the fat of the land." Wherever a population "lives high," death after middle age strikes suddenly and often. Whereas coronary disease (Continued on page 26)

# The Consumers' Observation Post

BROILING A STEAK PROPERLY is something that practically every man prides himself on doing well. Those who have not yet mastered this technique can secure directions for broiling various kinds of meat from the American Meat Institute, 59 E. Van Buren St., Chicago 5, Ill. General directions call for preheating the broiler five to ten minutes, having steaks cut at least three quarters of an inch thick, and placing the meat at the proper distance from the heating element. The closer the meat is to the heat, the higher the temperature of broiling. The thicker the meat or the more thoroughly it is to be cooked, the farther it should be placed from the broiling unit. Allow a distance of two to three inches for one-inch steaks, three to five inches for thicker cuts. Of course, as everybody knows, the best steaks are those which are broiled out-of-doors over red-hot wood coals or charcoal, but that technique is not always practicable, particularly for the city dweller.

THERE ARE A LOT OF LITTLE THINGS the matter with 1957 automobiles that should not have escaped the factory's workmen and inspectors. According to Automotive News, dealers are working hard at pacifying customers who complain of edges of doors, trunk lids, and similar spots where paint is missing or has been knocked off. Some electric clocks have been fitted with 2-ampere fuses that permit the safety wire inside the clock to burn out. Other complaints: finishes are poor and wax jobs are carelessly applied; the new engines do not handle regular grades of gas well.

HOW OFTEN SHOULD YOU PAINT THE OUTSIDE OF YOUR HOUSE? According to the United States Department of Agriculture, natural wood stains should last at least five years, but sometimes such finishes need renewal every other year or two. If stain or penetrating natural finish has been used, it is only necessary to apply a fresh coat over the old one. Glossy finishes require a different technique because they don't wear evenly. In such cases, the United States Department of Agriculture recommends applying fresh finish only on weatherbeaten areas, blending over worn and unworn areas to give a uniform appearance. The general basic rule given by the U.S.D.A. for repainting is to paint after the old film has weathered away, and to apply one coat every four or five years, or two coats after six years; with dark-colored paints, one coat every six years should be enough.

HOW TO TAKE OFF EXCESS POUNDS and reduce body weight effectively is a topic of much interest these days. Physicians are generally agreed that the only satisfactory method of weight control is the reduction of food intake; but Dr. Weldon J. Walker of Fort Sam Houston, Texas, points out that weight reduction accomplishes little unless the reduced weight is maintained faithfully. He further comments that the person who reduces sporadically only to regain his weight later is probably damaging his health and is worse off than one who remains corpulent. The big problem is not just taking pounds off but in keeping them off by establishing proper dietary habits.

CHILDREN WHO ARE ON A HIGH LIQUID DIET, principally milk and juices, may not be receiving enough protein. Dr. H. D. Lynch of Evansville, Indiana, has pointed out that symptoms of anorexia, gastrointestinal distress, pallor, frequent infections, and carries will often be relieved if the protein in their diet is increased to 15 percent of the calorie intake. Drinking too much milk may lead to nutritional difficulties and insufficient protein in the tissues.

TINY AUTOMOBILES FROM ABROAD are appearing in the United States in ever-increasing numbers. The Volkswagen still is far in the lead among foreign cars sold in the U.S. Other makes that are to be seen more frequently, in addition to the familiar MG, include the Renault Dauphine, the Heinkel Cabin Cruiser, and the Isetta. Two of the chief advantages of the smaller cars are increased gasoline mileage and ease of parking. The chief disadvantages are cramped space and lack of power in climbing hills or passing other cars on the road, as well as the problem, which can be really serious, of obtaining repair parts promptly.

MEN'S SHIRTS OF DACRON AND COTTON do not always afford the advantages over cotton shirts that are claimed in the advertising. In a study made by Dr. Pauline E. Keeney at the Woman's College of the University of North Carolina, shirts of Dacron-and-cotton blends in Oxford, batiste, and broadcloth were compared with all-cotton shirts of the same fabrics. It was reported by the wearers of the 70 shirts studied that wrinkling during wear was an outstanding characteristic of both Dacron-and-cotton and all-cotton shirts. Claims made for the Dacron-and-cotton shirts regarding comfort and attractive appearance after laundering were not substantiated. The wearers of these shirts also commented unfavorably on the presence of static electricity, the warmth of the fabric in normal atmosphere, and its retention of soil after laundering. While it was possible to wash the Dacron-and-cotton shirts and hang them to drip dry, some pressing or ironing was considered necessary for neat appearance.

FOAM-RUBBER SEATS IN A CAR may be a cause of strain, fatigue, and backache. Professor Eleanor Metheny at the University of Southern California advises motorists to place a board over the foam rubber of the front seat, pointing out that on such cushions one side of the body can compress more than another, with a resulting unbalanced position. Driving the newer cars with only one foot pedal produces a second slant of the pelvis in relation to the back, since both legs are not forward. Long driving in such cases may result in aching muscles and needless strain.

ONE OF THE WORRIES OF THIS ATOMIC AGE is the danger of being in a city during a bomb attack. There is, of course, the risk of being in the direct path of an atomic missile, but the hazard from the fall-out of radioactive particles is another matter. According to a study made by Herman A. Heise, M.D., and Eugenia R. Heise, M.T., Milwaukee, of the effect on a city of the fall-out of pollens and molds, a city should be much safer from atomic fall-out than the surrounding country because the warm-air currents rising over the city effectively disperse particles to rural areas away from the city on the leeward side. They suggest that in the event of an atomic blast even an isolated village or single residence might achieve some protection from fall-out by lighting fires on the windward side. They recommend practical application of their findings to Civilian Defense in order to prevent an hysterical exodus from the city to rural areas that might be more dangerous.

MONOSODIUM GLUTAMATE, sold to consumers under such names as Accent and commonly called MSG, is being used increasingly in frozen foods to help preserve color and flavor, according to a trade release. On precooked frozen foods, it is reported to prevent the development of "warmed-over" off-flavors during storage, to retard or prevent development of other off-flavors during storage, and help retain the color and freshness of the product treated. It appears that three out of four "good" restaurants are now using the stuff, and heaven help those who are allergic to it. They will be obliged to bring their lunch to work and eat freshly prepared food at home. One can always read the label in buying frozen or canned foods that contain the flavor substance, but how can the poor consumer tell in what restaurant dish it is to be found?

(The continuation of this section is on page 33)

# Consumer Bulletin

THE ORIGINAL CONSUMER INFORMATION MAGAZINE

OFF THE EDITOR'S CHEST

"Only \$29.50" was the advertised price for a rebuilt round-bobbin Singer sewing machine plus attachments and other "extras worth \$48." Or perhaps you would be interested in a rebuilt General Electric or Hoover vacuum cleaner for \$11.95. That would be quite a bargain if it were in good working orderand you could get it-wouldn't it? The difficulty was that the machine in each case was "nailed to the floor."

For several years and in many different cities throughout the United States it has been the practice of certain types of stores to use this sort of "bait" to lure an unsuspecting prospect into the shop or to gain the admission of a high-pressure salesman into her home. Then it appears that the last sewing machine or vacuum cleaner at the bargain price has just been sold, or the one available is just a floor model and there will be a delay of several months in securing more stock, or, if the customer insists on trying one that is available at the price advertised, it fails to work satisfactorily. With sewing machines, in some cases, a salesman delivers the bargain machine but it won't sew. It just happens that he has a good one in his car for something like \$150 on which the first down payment is \$29.50.

The victims of bait advertising are too often those who can least afford high-priced products. This technique is particularly successful over the radio and on television, although such advertising can also be found in some

(Continued on page 29)

VOL. 40, NO. 1 CONTENTS **JULY 1957** Fat in the diet 2 This article will tell you how you may lengthen your life and help to postpone the inevitable disabilities and weaknesses of old age Rotary power mowers.... Detailed listings of Choremaster, Cooper, Craftsman, Eclipse, Fairbanks Morse, Goodall, Homko, Jacobsen, Lawn-Boy, Penn Acco, Reo, Snapper, Thrifti-Cut, Toro, Wardmaster Those troublesome appliances that forever need repair. Tennis balls 12 Dating and numbering stamps 13 Flashlights. Small portable fire extinguisher Fans for summer cooling. 18 included in this article are listings of six mobile fans and six window ventilating fans Hedge trimmers 22 Listings of eight trimmers, as well as information on safety pre-cautions necessary with any electrically-powered tool used out-doors Note to our readers 26 Be careful with spray cans 35 **FEATURES** The Consumers' Observation Post Off the editor's chest - Don't fall for bait and switch advertising ..... 5 Ratings of Motion Pictures 30 Phonograph Records Walter F. Grueninger

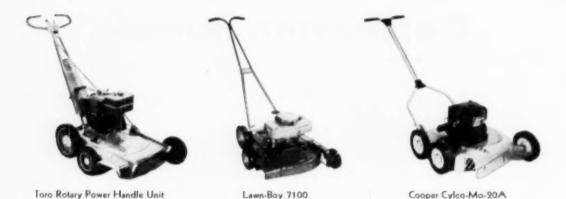
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Note: Use of any of the material in this Bulletin for any sales or advertising purpose is not permitted. Application for permitted in special part of the purposes should be made by letter. Listings usually are arranged in alphabetical order by brand name (not in order each quality or performance rating. A numeral 1, 2, or 3 at the end of a listing indicates relative prior, I being low, 3 high. Where the 1, 2 apprior ratings are given, brands in the 1, or least expensive group, are listed alphabetically, followed by brands in priors group 2, also in alphabetical order, etc. A quality judgment is wholly independent of price.

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## Rotary power mowers

In spite of the fact that the rotary whirlingblade type of mower is much more dangerous than the reel-type mower and has been the cause of many serious and fatal injuries, it is very popular among homeowners, and its popularity continues to increase.

The rotary mower costs about \$15 to \$20 less to make than the reel type, and has been sold at retail for as low a price as \$40 as compared with \$70 for the cheapest reel mower. The owner can sharpen the blades of a rotary mower himself, with a file or home grinding wheel. The cutting element of a rotary mower requires no adjustment (probably few owners can adjust the reel and bedknife of a reel-type mower to the best advantage). The rotary mower will cut much higher grass than a reel-type mower and it cuts weeds (buckhorn and dandelion, for example) that the reel type leaves standing. However, on lawns that are in good condition and relatively free from weeds, the reel-type mower does a better job.

Some homeowners with large lawns to cut often find use for both a rotary and a reel-type mower.

#### Size of mower

The smaller mowers in both rotary and reel types with a width of cut of 17 or 18 inches are the easiest to operate and maneuver, and satisfactory for small lawns. They will take a longer time to mow large areas of an acre or more; a mower that will cut a 22-inch or larger swath is desirable for larger lawns. The larger mowers are usually heavy and harder to push.

#### Hazards of rotary mowers

Rotary-type mowers must be used with extreme care; they are inherently far more dangerous than the reel type. Accidents, some of which have been responsible for loss of limb, of eyesight, and even of life, are very common.

A survey of 19 hospitals in Pittsburgh alone revealed 89 rotary mower injuries in one season (1956), 48 to the toes and feet, 36 to the fingers and hands, four from flying foreign objects, and one from overturning of a self-propelled mower (Dr. Wm. L. White before a meeting of the American Association for the Surgery of Trauma).

Gratings and other types of guard intended to prevent access of the feet and fingers to the cutter blade soon clog with clippings and then present an even greater danger, since the user may attempt to remove the clippings without shutting off the mower. Some manufacturers lessen the danger by designing the body so that the revolving blade tip is spaced a considerable distance from the chute exit. (See test picture, p. 7.)

Self propulsion adds about \$30 to the price of a rotary mower and reduces the power available to the cutting blades. Because of the inherent dangers of rotary mowers to operators—likewise to persons in the vicinity—CR does not give an A-Recommended rating to any of the rotary mowers tested. The hazards of self-propelled rotary mowers are even greater.

#### Hazards of reel mowers

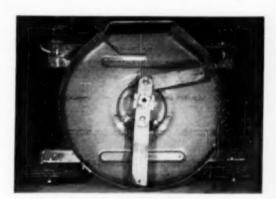
Especially hazardous for consumers using reeltype mowers is any attempt to remove small twigs or bits of wire or other material that may have caught between the bedknife and the reel blades, while the engine is running. The engine must be stopped; throwing out the clutch is not sufficient.

#### Two-cycle vs. four-cycle engines

Two-cycle engines used on some of the cheaper mowers have a number of disadvantages. They are less durable, and engine lubrication is achieved by mixing oil with gasoline at the time the gasoline is put into the tank, which is inconvenient. The two-cycle engines have the advantage that they can be turned upside down without spilling oil. This is important for rotary mowers, which require a thorough cleaning of the underside of the body after each use.

#### Expected life of a power mower

A good reel-type mower, given reasonable care and average use, should have a useful life of 7 to 10 seasons. A rotary mower of equally good manufacture, used under similar conditions, will give somewhat less service before requiring major overhauling or replacement of parts, say about 5 seasons (2 to 21/2 for the cheapest rotary mowers). The shorter life of the rotary mower is due to the fact that its engine runs at a much higher average speed, is subjected to greater shock loads, and more vibration, and is operated under conditions that expose the engine to a greater amount of dust and dirt. Rotary mowers with aluminum bodies used near the seashore require special care to minimize deterioration by corrosion. After use, a mower used near the

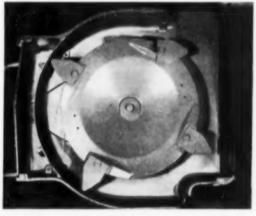


The blades of this mower (the Homko RF-22A) were hinged, so as to permit them to swing back when a solid object is struck; this design lessens the possibility of damage to the engine crankshaft. The blades resume normal cutting position due to the action of centrifugal force. In the tests the blades were allowed to strike a 1½-inch square oak stake driven into the ground and protruding about 2 inches. There was no apparent damage to the engine or blades.

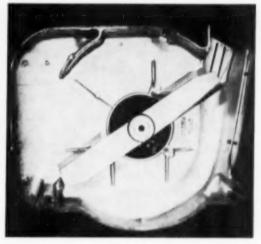
shore should be flushed with a garden hose to remove salts and salty moisture from the underside of the body.

Unless otherwise noted in the listings, engines are four-cycle and cutters were of steel with two cutting edges, one at each end, which could be sharpened with a file; cutting heights were adjusted by changing wheel axles to holes at different heights in the body of the mower. All except Thrifti-Cut had recoil-type rope starters.

Prices given are list. Considerable money can be saved by buying a mower when the season is well along, when prices are cut considerably. One large discount house has advertised power mowers with four-cycle engines at \$50 (alleged



The disk type of cutter with pivoted mower section blades as used on the Jacobsen Model 21MB.



Straight bar type of cutter as used on most mowers. Note also the distance of the blade tip from the outer edge of the chute exit, which provides some safeguard.

TABLE 1-ROTARY POWER MOWER ENGINE SPECIFICATIONS

| Brand and model            | Make of engine and model No. | Rated<br>hp. | 2-cycle<br>or<br>4-cycle | Cylinder and piston material         | Main<br>bearing material            | Variable<br>throttle<br>control |
|----------------------------|------------------------------|--------------|--------------------------|--------------------------------------|-------------------------------------|---------------------------------|
| Choremaster A 1229         | B & S, 8BH                   | 2.75         | 4                        | Al alloy                             | Al alloy                            | No                              |
| Cooper Cyclo Mo 20A        | B & S, 6BH                   | 2.25         | 4                        | Al alloy                             | Al alloy                            | No                              |
| Craftsman 99 8160          | Craftsman                    | 2.75         | -4                       | Al alloy with<br>C.I. cylinder liner | Al alloy                            | No*                             |
| Eclipse Duo Master 19      | B & S, 6BH                   | 2.25         | 4                        | Al alloy                             | Al alloy                            | No                              |
| Fairbanks Morse RD-21-R    | Clinton, VS100               | 2.5          | 4                        | Al alloy with<br>C.I. cylinder liner | Bronze and Al                       | Yes                             |
| Goodall 19L                | Lauson, V-20                 | 2.0          | 4                        | Al alloy with<br>C.I. cylinder liner | Al alloy                            | No                              |
| Homko RF-22A               | B & S, 8BH                   | 2.75         | 4                        | Al alloy                             | Al alloy                            | No                              |
| Jacobsen 21MB              | Jacobsen                     | 3.0          | 2                        | Al alloy with<br>C.L cylinder liner  | 2 ball bearings<br>1 needle bearing | Yes                             |
| Lawn Boy 7100              | Lawn Boy, C12                | 2.0          | 2                        | Al alloy with<br>C.I. cylinder liner | Al alloy                            | No                              |
| Penn Acco                  | B & S, 6BH                   | 2.25         | 4                        | Al alloy                             | Al alloy                            | Yes                             |
| Reo Spin Trim TK-21        | Reo, 5230K                   | 2.25         | 4                        | C.I. cylinder<br>Al piston           | Replaceable<br>bushings             | Yes                             |
| Snapper Twenty DeLuxe 20D1 | B & S, 6BH                   | 2.25         | 4                        | Al alloy                             | Al alloy                            | Yes                             |
| Thrifti-Cut 8-D-103        | Clinton, VS200               | 2.0          | 2                        | Al alloy with<br>C.I. cylinder liner | Al                                  | No                              |
| Toro Power Handle          | B & S, 8B                    | 2.75         | 4                        | Al alloy                             | Al alloy                            | Yes                             |
| Toro Whirlwind 18          | B & S, 6BHS                  | 1.75         | 4                        | Al alloy                             | Al alloy                            | No                              |
| Wardmaster 21              | Clinton, VS100               | 2.5          | 4                        | Al alloy with<br>C.I. cylinder liner | Bronze and Al                       | No                              |

Aluminum; C.I.—Cast Iron; B & S—Briggs and Stratton.
 Had two speed settings, run and idle.

TABLE 2 ROTARY POWER

| Brand and model            | Body<br>material | Location of chute; | Type of wheel bearings | Wheels<br>offset | Leaf<br>mulcher<br>furnished |
|----------------------------|------------------|--------------------|------------------------|------------------|------------------------------|
| Choremaster A-1229         | Die east Al      | Right center       | Ball                   | No               | Extra                        |
| Cooper Cyclo Mo 20A        | Die cast Al      | Right front        | Ball                   | Yes              | Extra                        |
| Craftsman 99 8160          | Steel            | Right center       | Steel sleeve           | No               | No                           |
| Eclipse Duo Master 19      | Steel            | Right center       | Ball                   | Yes              | Extra                        |
| Fairbanks Morse RD 21 R    | Die east Al      | Right center       | Ball                   | No               | Yes                          |
| Goodall 19L.               | Die cast Al      | Right front        | Nylon sleeve           | Yes              | Yes                          |
| Homko RF 22A               | Steel            | Right center       | Steel sleeve           | No               | Extra                        |
| Jacobsen 21MB              | Die cast Al      | Right front        | Steel sleeve           | Yes              | Extra                        |
| Lawn-Boy 7100              | Die cast Al      | Right front        | Nylon sleeve           | Yes              | Extra                        |
| Penn Acco                  | Die cast Al      | Rear center        | Nylon sleeve           | Yes*             | Yes                          |
| Reo Spin Trim TK 21        | Steel            | Right center       | Ball                   | No               | Yes                          |
| Snapper Twenty DeLuxe 20D1 | Steel            | Right center       | Ball                   | No               | Extra                        |
| Thrifti Cut 8 D 103        | Steel            | None               | Nylon sleeve           | No               | No                           |
| Toro Power Handle          | Die east Al      | Right front        | Steel sleeve           | Yes              | Yes                          |
| Toro Whirlwind 18          | Die east Al      | Right front        | Bronze sleeve          | Yes              | Yes                          |
| Wardmaster 21              | Die east Al      | Right front        | Steel sleeve           | Yes              | Yes                          |

\* See listing. † Shear pin. Al-aluminum. ;See Craftsman listing.

list price, \$119.50). The ratings which follow are based on the over-all design and performance of the mowers and are intended as a guide for those who may decide to buy a rotary mower, in spite of the great number of serious injuries they are constantly causing.

#### Hand-propelled rotary

B+

Goodall, Model 19L (Goodall Sales Corp., Minneapolis 18) \$90. Well guarded except at chute exit. Had an adjustable front guard. Carried warnings, "Caution. Keep hands and feet clear of machine when no operation. Disconnect spark plug wire when adjusting machine." This mower did a good job of mowing and was easy to push; it spread grass cuttings evenly over the lawn. Lauson engine was very easy to start, and did not falter or stall in very heavy grass. Model 20G, at \$139.50, with heavy-duty ball-bearing Goodall Lauson engine should be worth the extra price for those who require long life before major repairs are needed. A well-built mower.

Tore Whirlwind 18 (Toro Mfg. Corp., Minneapolis 6) \$94.50. Well guarded except at chute exit. This mower did a good job of mowing and was very easy to push; it spread the grass cuttings evenly over the lawn.

Wardmarter 21 (Montgomery Ward's Cat. No. 84—8331) \$86.50, plus freight. Cutting height quickly and easily adjusted. Carried a warning in clear view of

operator, "Keep hands and feet from under mower. Stop engine before making adjustments." Considered a good mower of its type. Well guarded except at chute exit. Rear deck extends about 6 in. beyond tips of revolving blades, a good safety feature. This mower did a good job of cutting and was easy to push; it spread the grass cuttings evenly over the lawn. 2

Cooper Cyclo-Mo-20A (Cooper Mfg. Co., Marshalltown, Iowa) \$116.50. Well guarded; chute exit had three removable rods set at an angle, but these would not be effective in preventing the operator's fingers from coming into contact with blade. Rods in chute caused clogging in heavy grass; this trouble did not occur when rods were removed. (Grass cuttings were than spread evenly over the lawn.) Two good safety features: (1) Rear deck extends about 4 in. beyond the tips of the revolving blades (see Wardmaster). (2) The wheels were set close together on the side from which the engine is started, a feature which helps prevent the feet or toes of the operator from getting under the machine. Did a good job of mowing and was easy to push.

#### B. Intermediate

Thrifti-Cut, No. 8-D-103 (Barnes Mfg. Co., North Kansas City, Mo.; sold by Firestone Stores) \$40. Two-cycle engine. Fairly well guarded except at rear where skirt did not extend below blade. As this mower had no chute exit, grass cuttings were deposited on lawn in windrows and required to be raked up; mowing was otherwise satisfactory. Light weight made this mower very easy to push. Considered suitable for

#### MOWER SPECIFICATIONS

| Width of | Height of cut<br>adjustment,<br>in. | Engine shaft protection device | Side | from<br>Front<br>ches | Distance of blade from chute exit, in. | Weight, | Brand and model           |
|----------|-------------------------------------|--------------------------------|------|-----------------------|--|---------|---------------------------|
| 21       | 1.5 - 3.5                           | Yes                            | 1.0  | 4.5                   | 1.25                                   | 65      | Choremaster A 1229        |
| 20       | 1.4 - 3.4                           | Yes                            | 1.0  | 3.5                   | 4.0                                    | 56      | Cooper Cyclo Mo 20A       |
| 21       | 0.5 - 3.0                           | Yes                            | 0.5  | 4.0                   | 1.75                                   | 71      | Craftsman 99 8160         |
| 19       | 1.0 - 2.75                          | Yes                            | 0.5  | 1.75                  | 1.5                                    | 60      | Eclipse Duo Master 19     |
| 21       | 0.75 - 2.75                         | Yes                            | 0.6  | 5.0                   | 1.0                                    | 66      | Fairbanks Morse RD 21 R   |
| 19       | 0.75 - 2.75                         | Yes                            | 0.5  | 1.0                   | 3.5                                    | 52      | Goodall 19L               |
| 22       | 0.5 - 3.00                          | No*                            | 0.5  | 0.80                  | 1.0                                    | 63      | Homko RF 22A              |
| 21       | 0.6 - 2.75                          | No                             | 0.9  | 2.0                   | 3.0                                    | 66      | Jacobsen 21MB             |
| 21       | 1.0 - 3.0                           | Yes                            | 0.5  | 1.25                  | 3.25                                   | 47      | Lawn Boy 7100             |
| 20       | 1.25 - 3.25                         | No                             | 0.6  | 3.0                   | 2.5                                    | 47      | Penn Acco                 |
| 21       | 1.0 - 3.25                          | Yes                            | 0.5  | 5.8                   | 0.5                                    | 74      | Reo Spin Trim TK 21       |
| 20       | 1.5 ~ 2.75                          | Yes                            | 1.0  | 4.25                  | 0.5                                    | 65      | Snapper Twenty DeLuxe 20D |
| 18       | 1.4 - 2.4                           | No                             | 2.0  | 1.0                   |  | 37      | Thrifti Cut 8-D-103       |
| 22       | 1.00 - 3.00                         | Yest                           | 1.0  | 2.0                   | 3.0                                    | 96      | Toro Power Handle         |
| 18       | 0.75 - 2.75                         | Yes                            | 0.5  | 1.75                  | 3.75                                   | 46      | Toro Whirlwind 18         |
| 21       | 0.75 - 2.5                          | No                             | 0.9  | 2.3                   | 3.25                                   | 66      | Wardmaster 21             |



A warning in large type and clearly visible to the user appears on the Montgomery Ward mower. Such cautionary wording should be present on all rotary mowers.

use on small lawns. This was the lowest-priced mower tested, and seemed to be very good value for the money.

Eclipse Duo Master 19 (Eclipse Lawn Mower Co., Prophetstown, Ill.) \$97.50. A well-guarded mower; however, hinged-wire guard over chute exit caused clogging of grass. With the guard raised, the cuttings were not evenly distributed, and clumps were deposited at intervals. Mower had warning, "Caution—keep hands—feet away" in raised letters over chute exit, but this should have been painted in a contrasting color to attract attention. The Eclipse did a good job of mowing, but was somewhat hard to push when mowing uphill and when set at lowest cutting position.

Lawn-Boy 7100 (Lawn-Boy, Division of Outboard Marine Corp., Lamar, Mo.) \$100. Two-cycle engine. Left front wheel staggered and mounted on springloaded arm (a good feature) to reduce scalping of turf. Had warning in raised letters cast in body, "Caution. Keep hands and feet from under machine," but this should have been painted in contrasting color to attract attention. Switch on engine housing marked Off, On, Choke (considered a desirable feature). A well-guarded mower except at chute exit. Cuttings were well distributed over the lawn (an attachment is available at extra cost which causes the grass cuttings to be deposited in windrows for raking up). Did a good job of mowing and was very easy to push and maneuver. A good mower; would be rated B+ for those who do not object to a two-cycle engine (see text).

Craftsman (Sears-Roebuck's Cat. No. 99—8160) \$102.50, plus freight. Well guarded except at chute. Fully enclosed V-belt drive from engine to blade shaft, which is used as a clutch operated by a foot pedal clutch. This clutch permits the engine to run without turning the blade, thus providing safety in starting and when the engine is idling. Warnings on top of body, "Danger! Revolving blade—keep hands and feet away. Always disengage safety clutch when not mowing." Did a good job of mowing. Slight clogging of grass at one side of the clutch, but the grass was spread evenly over the lawn. Mowers with a clutte exit in the center of the right side have a tendency to throw grass clippings over the operator. The Craftsman was especially

bad in this respect when a slight breeze was blowing. Relatively easy to push. Control panel on top of engine housing marked Stop, Idle, Run, Choke. Belt replacement required removal of engine and was a difficult task.

Jacobsen, Model 21MB (Jacobsen Mfg. Co., Racine, Wis.) \$117.50. Two-cycle engine. A disk carries four replaceable sickle-bar-type knives, each fastened with a single bolt permitting them to swing back if an object is struck which cannot be cut. This mower is well guarded except at chute exit. Had adjustable front guard. The mower did a fairly good job of mowing, but it was hard to push; it spread grass cuttings evenly over the lawn. Control panel on engine marked Stop, Run, Choke, Fast, Idle.

Penn Acco (Pennsylvania Lawn Mower Division, American Chain & Cable Co., Inc., Exeter, Pa.) \$110. The position of the left front wheel could be changed from the staggered position (used in regular mowing, to lessen scalping of the turf in mowing on uneven ground) to an inset position to permit mowing very close to fences and walls. Well guarded except at chute exit. Location of chute at rear is not as desirable as front-right location. This mower did a good job of mowing but was hard to push at lowest setting; it spread grass cuttings evenly over the lawn.

Reo Spin Trim TK-21 (Motor Wheel Corp., Lansing 3, Mich.) \$120. Chute exit was a rectangular hole in right side of body. Two plates were provided for covering this exit for leaf mulching; bottom plate only is used for regular mowing. Instructions called for both plates to be removed in mowing of long grass and weeds; potentially dangerous as tips of revolving blades were very close to the surface of the casing. With bottom plate in position for regular mowing, mower was well guarded. Otherwise not. In cutting heavy grass, the mower deposited some of the cuttings in clumps on the lawn. This Reo was pushed fairly easily (about average).

The following four mowers were considered more hazardous to operate than the others tested because the design was such that the revolving blades came too close to the chute exit for safety.

B-

Choremaster, Model A-1229 (Choremaster Div., Weber Engineered Products, Inc., Cincinnati 4) \$115. Had decal on top of body, "Safety First Stop engine when making adjustments. Keep hands and feet from under mower." Well guarded except at chute exit. The revolving blade tips were very close to chute exit a potential hazard. Mowed satisfactorily and was easy to push. Some clogging of grass cuttings at chute exit and some of the cuttings were deposited in clumps on the lawn.

Homko RF-22A (Western Tool & Stamping Co., Des Moines 13, Iowa) \$115. Well guarded except at chute. Chute exit was exceptionally large, making this Homko somewhat more hazardous at this location than most mowers. Warnings on top of mower, "Keep hands and feet out of discharge chute" also "Do not place hands

or feet under machine at any time. When sharpening blade be sure to disconnect motor plug." Cutter blades on this machine were jointed, permitting the end sections of the blades to swing back when a solid object is hit accidentally (see picture on page 7). The Homko did a good job of mowing and was easy to push; it spread grass cuttings evenly over the lawn, but there was a tendency for some grass to catch at one corner of the chute. Some users, no doubt, would be tempted to try to remove these cuttings from the chute with the engine running.

#### C. Not Recommended

Snapper Twenty DeLuxe, Model 20D1 (McDonough Power Equipment Inc., McDonough, Ga.) \$97.50. Cutter bar had replaceable knives attached to rotor bar by bolts and lock washers. Handle was adjustable for height, but after adjustment had to be bolted in a fixed position, an undesirable arrangement. Chute exit, which was a rectangular hole in right-hand side of body, was not well guarded. The revolving blade tips were very close to chute exit, a potential hazard; otherwise the mower was judged well guarded. Mowed bar at bottom of chute exit caused some clogging with grass cuttings; consequently the mower deposited some of the cuttings in clumps on the lawn.

Fairbanks Morse, Model RD-21-R (Fairbanks Morse & Co., Fair Lawn, N. J.) \$109.50. Well guarded except at chute exit which was similar in type to that of Snapper Twenty and was a potential hazard. Method of attaching handle was such as to permit mower to roll back over feet of operator (a hazardous feature). Cutting height was easily adjustable. The mower did a good job of mowing and was fairly easy to push; it

spread grass cuttings fairly evenly over the lawn, but clogged badly beneath body above the front axle rod. 3

#### Self-propelled rotary

#### C. Not Recommended

Toro Rotary Power Handle Unit (Toro Mfg. Corp., Minneapolis 6) \$110; power handle, \$90. A selfpropelled rotary mower. V-belt drive from engine through bevel gears to cutter blade. Traction drive to wheels by V-belt, with idler pulley acting as a clutch. Well guarded except at chute. Did a fair job of mowing; it spread grass cuttings evenly over the lawn. Combined weight of power handle and rotary unit was 96 lb., making the mower more difficult to maneuver than mowers of much lighter weight. Power unit was easy to attach and remove; this action required the operation of a single clamping screw, putting on the belt, and attaching the clutch control to the handle. Maximum speed, 2.6 m.p.h. Somewhat noisy in operation. One dser found the mower unsatisfactory to handle in practical mowing for a variety of reasons. 3

We hurried to get the information resulting from our tests to you in time to be of the greatest service. A report on the results of tests of several reel-type mowers including the Toro, the Toro Power Handle, the Toro Power Handle Tiller Unit, two mowers of a relatively new hammer type, neither rotary nor reel in the conventional sense, and the Scott Electric rotary mower will appear in the August issue of the Bulletin. The August issue will also include additional information on the very serious hazards power mowers present.

# Those troublesome appliances—that are forever needing repair or adjustment

A NOTE of interest to appliance manufacturers from a letter of a Consumer Bulletin reader in Massachusetts:

Sometime you might stress a point generally missed. My wife and I limit our ownership to half the appliances we want because of breakdown and repair. The appliances we must have give so much trouble with repair calls, we cannot add to our appliances. (We'd cut down if we could.) We are in the market for non-breakables.

Manufacturers may think our reader expects too much, but we know that our correspondent's complaint is justified from our own experiences with appliances. The constant flow of findings in our laboratories reveals needless sources of trouble in appliance design and details, and show beyond question that a lot more can be done than has been done to make washers, dishwashers, vacuum cleaners, and other appliances dependable and trouble-free. The consumer has a right to expect that an expensive appliance will plug along month after month without need to call in the man with the boxes of tools and wrenches, who wants, and gets, \$5 an hour or so for his ministrations.







# Tennis balls

The united states lawn tennis association has established certain requirements for tennis balls to be used in tournament playing. These govern the diameter and weight of the ball, the height of its rebound, and its deformation under pressure. U.S.L.T.A. specifications relate only to new tennis balls, of course, because only fresh, new balls are used in important tournament play. However, there is no doubt that a good many tennis players are as much concerned with the expected life of a tennis ball as with its performance when new.

Consumers' Research checked six balls of each make chosen for test for compliance with the U.S.L.T.A.'s requirements for size, weight, and height of rebound when new. Wilson was the only brand of which all six balls passed all three of these U.S.L.T.A. tests.

To determine the effect of age on the tennis balls, their rebound was measured, as shown in the illustration, before and after artificial aging in an oven for seven days at 158°F (a standard temperature used for accelerated aging of vulcanized rubber). The height of rebound was considerably decreased in all cases, in some by as much as 14 inches. (The specifications require a rebound of 53 to 58 inches when the ball is dropped from a height of 100 inches.)

Wear resistance of the covers was determined by tumbling the balls in a large drum rotated at about 24 revolutions per minute for six hours. Coarse abrasive paper was attached to about two fifths of the interior surface of the drum to accelerate the wearing effect. As in the aging test, three balls of each brand were used. The height of rebound was measured before and after tumbling. There was an increase of rebound, which was slight, in every case; at worst it was only half the permissible variation in rebound of new balls. (The maximum increase was 21/2 inches, for the MacGregor and Wilson balls.) This test did not represent any particular number of hours of playing time, but the results showed the relative rates of wear of the different brands, and the balls as worn at the

end of CR's test would undoubtedly be regarded by many players as ready to be discarded. The weight of the balls was determined before and



TESTING THE REBOUND OF TENNIS BALLS
The height of the rebound of tennis balls was observed on a graduated matt-surface screen strongly illuminated from behind. A slide projector was placed 26 feet behind the screen; the ball was held by vacuum, at the lower end of the pipe seen at the top of the picture, 100 inches above the concrete floor. The observer released the ball in an accurately reproducible manner by cutting off the vacuum. The bounce of the ball took place just behind the screen so that the highest point reached by its shadow could be accurately noted and recorded.

after tumbling, to find how much of the surface of the ball had been worn away.

It was found that the Cortland, Victor, and J. C. Higgins balls stood up best in the wear test, but two of these, the Victor and J. C. Higgins, showed the greatest loss of rebound from aging of all the balls tested. Dunlop, Wilson, and MacGregor, which were the least resistant to wear, were the three best in resistance to aging.

It is possible that the failure of the Olympic balls to reach the minimum rebound height of 53 inches may be accounted for by the fact that they were packed in cardboard boxes, whereas all the other brands were supplied in pressure cans. The Olympic balls were below the standard requirements in other ways, for all of the six tested fell below the minimum requirements for size and weight.

#### A. Recommended

Cortland (Cortland Racket Division, Cortland Line Co., Inc., Cortland, N. Y.) Can of 3 for \$2.40. Passed size and weight requirements. Rebound when new was a little low. Resistance to wear, very good; to aging, fair.

**Dunlop** (Dunlop Tire & Rubber Corp., Buffalo) Can of 3 for \$2. One of six balls tested was too small to meet minimum size requirements. Resistance to wear, poor; to aging, good.

MacGregor (The MacGregor Co., Cincinnati 32) Can of 3 for \$2.40. One of six balls tested exceeded maximum weight limit. Resistance to wear, poor; to aging, good. Pennsylvania X-76 (The Pennsylvania Athletic Products Division, General Tire & Rubber Co., Akron 9, Ohio) Can of 3 for \$2.65. Passed size and weight requirements. Rebound when new, a little too high. Resistance to wear, fair; to aging, good.

Wilson (Wilson Sporting Goods Co., 2037 N. Campbell Ave., Chicago) Can of 3 for \$2.35. Passed size and weight requirements. Resistance to wear, poor; to aging, good.

Wright & Ditson (Wright & Ditson, 161 Sixth Ave., New York 13) Can of 3 for \$2.50. One of six balls tested exceeded maximum weight limit. Resistance to wear, fair; to aging, poor.

#### B. Intermediate

**J. C. Higgins** (Sears-Roebuck's Cat. No. 1231) Can of 3 for \$2.09, plus postage. Three of six balls were lighter than the minimum acceptable weight. Resistance to wear, fairly good; to aging, poor.

**Spalding** (A. G. Spalding & Bros., 161 Sixth Ave., New York 13) Can of 3 for \$2.20. Two of six balls were lighter than the minimum acceptable weight; one was too small in diameter. Resistance to wear fair; to aging, poor.

Victor (Montgomery Ward's Cat. No. 5700) Can of 3 for \$2.09, plus postage. Three of six balls were lighter than the minimum acceptable weight. Resistance to wear, good; to aging, poor.

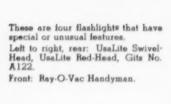
#### C. Not Recommended

Olympic (Made in England) 75c each. Failed to meet minimum requirements for size, weight, and rebound.

## Dating and numbering stamps

PEOPLE who do a great deal of clipping and filing of newspaper and magazine articles sometimes have use for a stamp that will do for stamping dates of a number of years back—dates for which one of the common band daters showing month, day of the month, and year may no longer be available. For this use one may employ a number band stamp that has bands for as many as six or eight digits. Several sizes of

types are available on daters from 3/32 inch to 3/16 inch and on numberers from 5/32 inch to 5/8 inch in height. Prices for daters range from about 50 cents to \$1 each, and for number band stamps from about \$1 for smaller sizes up to over \$7 for large-size type in a 6-band stamp. One source of supply is Goldsmith Bros., 77 Nassau St., New York 8.





## **Flashlights**

THE FLASHLIGHT is a simple implement, yet it is one of the most useful inventions of modern man, and almost indispensable. One or more dependable flashlights, and spare batteries, should be kept readily available in every home and automobile. *Dated batteries* are much to be preferred, but unfortunately few, if any, manufacturers produce dated batteries nowadays.

The steel-jacketed so-called "leakproof" batteries are not dated, and even though guaranteed not to leak or swell, they do sometimes. Consumers' Research knows of at least two instances where battery manufacturers who do provide a guarantee to replace a flashlight damaged by a leaking battery have made good. However, a guarantee to supply a new flashlight later on is small consolation when one is stuck on a lonely road with a flat tire on a dark night. Flashlights that are seldom used should be inspected frequently, and leaking, swelling, or very weak batteries that give a poor light should be discarded.

The purchaser will do well to avoid unusual, novel, or out-of-the-ordinary types of flashlights. Consumers' Research considers that the tubular flashlight of the conventional form using two size D cells in series (each 1½ inches in diameter by 23% inches long) is best for most purposes. Spare batteries and bulbs for this widely sold type are readily available in any hardware or variety store.

In selecting a flashlight, look for one that projects a uniform spot of light when it is aimed at a light-colored surface several feet away. The flashlight should have a bright, well-polished reflector, a strong body with threaded parts having threads that start on easily and fit well, and a clear lens that is recessed slightly so that the rim will protect the lens from accidental damage. Bright chrome-plated cases are best since they are easiest to see if the flashlight is lost in the dark or dropped into water. Try the switch to see that it is not hard to push on, but does not move so easily that it might be turned on unintentionally or give an uncertain contact, and shake the flashlight to see that the light doesn't flicker. The most desirable type of case is one that may be opened at both ends, to facilitate removal of batteries that may be stuck.

Several brands of flashlights are now available with rechargeable batteries. These are expensive, and Consumers' Research's studies have indicated that they are probably not worth while for the ordinary flashlight user. However, for a person who uses a flashlight often, such as a farmer or night watchman, a good rechargeable-battery light will more than pay for itself in savings on battery replacement. CR tested two brands of this type: the Gould Multi-Lite and the Remington Charge-A-Lite. The Gould looks like a common two-cell flashlight, but has a socket in the end to plug in the battery charger.

Charging the batteries for 12 hours gives about six hours of useful battery life; the manufacturer claims that the cycle can be repeated up to 250 times on the same batteries. We do not yet know whether the batteries will last for 250 cycles, but tests so far indicate satisfactory life (25 cycles, so far, and performance still as good as when new). An ordinary flashlight uses up a set of batteries in about six hours of use, and to replace 250 sets of batteries would cost about \$75; this may be compared to the price of \$19.95 for the Gould Multi-Lite with charger, to be used on 115-volt alternating current. (A Gould model is also available that plugs into the cigarette lighter socket of a car for charging, at \$14.95. The Gould rechargeable batteries may also be purchased separately at \$8.60 per pair for use in an ordinary 2- or 3-cell flashlight.)

The Remington Charge-A-Lite is a small flashlight made of plastic that fits easily in the palm of the hand, and needs no external charger. When its two small batteries are exhausted, the entire flashlight is plugged into any alternating current outlet for recharging. However, the Charge-A-Lite, while handy and convenient, suffered from the disadvantage that it gave a very weak light, and this light lasted only about an hour when the flashlight was new. After only about 20 charge-discharge cycles, the light was so weak as to be of little use.

CR's tests included measurement of the light output of the flashlights, using several sets of fresh batteries and bulbs in each. A rolling test was done in accordance with Federal Specification W-F-00421b, as a flashlight, for obvious reasons, should be so shaped that it will not roll easily. About half of the lights failed to hold

their position when on a 15-degree slope as called for by the specification. A metal-cased flashlight that one already has which rolls too easily can be prevented from rolling by adding several large blobs of solder or soldering some brass nuts or washers around the rim.

Only six of the 14 flashlights using dry batteries included in the tests were capable of being opened at both ends for battery removal. Those having this desirable feature were the Gits A144, Hipco, UsaLite, UsaLite Red-Head, Western Auto, and Winchester.

The flashlights were all submerged in water for over half an hour. Considerable amounts of water leaked into the cases of all but the Winchester and Gits A122, but the flashlights all survived without being damaged except the Hipco. If a flashlight is accidentally dropped into water, it should be opened and allowed to dry thoroughly.

Unless otherwise noted, prices do not include batteries.

#### A. Recommended

UsaLite Red-Head (United States Electric Mfg. Corp., 222 W. 14 St., New York 11) \$2.25. Metal case; plastic lens, lens hood, and case end. Lens well protected. Has a metal loop at end of case for hanging light, and a bracket hinged at middle of case for standing the light at an angle (see picture, page 14). Bracket provides against rolling. Light output, good. 2

Winchester Bond (Olin Mathieson Chemical Corp., 460 Park Ave., New York 22) \$1.45, including batteries. Metal case; plastic lens rim; glass lens. Metal loop at end of case for hanging light. Does not roll too easily. Light output, very good.



The Gould Multi-Lite flashlight and battery charger.

#### B. Intermediate

Eveready Masterlite, No. 7251P (National Carbon Co., Div. Union Carbide & Carbon Corp., 30 E. 42, New York 17) \$1.95. Metal case; glass lens; plastic lens hood. Lens fairly well protected. Rolls too easily. Light output, very good.

Gits, No. A122 (Gits Molding Corp., 4600 W. Huron St., Chicago 44) \$1.98. Plastic lens and translucent plastic case. Reflector and bulb aim the light in a direction at right angles to the case. Does not roll too easily. Light output, good.

Gits, Model A-144 (Gits Molding Corp.) \$1.49.
Plastic lens and translucent plastic case. Bulb fits directly against battery terminal, a less desirable method of construction. Does not roll. Light output, good.

Ray-O-Vac (Ray-O-Vac Co., Madison 10, Wis.) \$1.85. Metal case; glass lens. Lens not protected. Bulb fits directly against battery terminal, less desirable construction. Does not roll. Light output, good. 2

Ray-O-Vac Handyman (Ray-O-Vac Co.) \$1.85. Metal case; glass lens. Lens protected by a metal rim. Switch is a ring that completely encircles the body of the flashlight so that it is always conveniently accessible (see picture). Rolls much too easily. Light output, very good.

Usalite Swivel-Head (United States Electric Mfg. Corp.) \$2.25. Plastic case and lens. No protection for lens. Metal loop at end of case for hanging light. Head containing bulb and reflector swivels through a 180° arc for setting the direction of the light beam (see picture). Would be convenient where the lamp must be set down on a floor or shelf to permit work on a tire, pump, or other equipment. Has a hook for hanging light from user's belt. Does not roll. Light output, fair.

Gould Multi-Lite, No. 2DRF-2 (Gould-National Batteries, Inc., Depew, N.Y.) \$19.95, including battery and charger to be used on 115-volt a.c.; \$14.95, with charger for use on automobile battery. Metal case; glass lens slightly recessed. Rolls too easily. Light output, good. This light (which is 35% heavier than the usual dry cell powered flashlight) is not recommended for anyone who uses a flashlight only occasionally. May be worthy of an A rating (depending upon results of repeated charge-discharge tests now going on) for one who will use a flashlight 5 or 6 hr. a week or more. Has the disadvantages that it cannot be recharged when electric power is not available, and recharging takes 12 hr. whereas new batteries can be put in a standard flashlight in a few seconds.

Gould Multi-Lite, No. 2DRF-3 (Gould-National Batteries, Inc.) Same as Gould 2D RF-2 except that case is made of fiber with neoprene ends, and light has no provision for flash. Does not roll. Light output, good.

#### C. Not Recommended

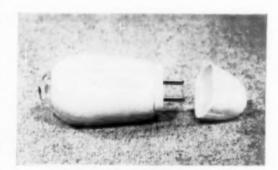
BMG (Bridgeport Metal Goods Mfg. Co., Bridgeport, Conn.) 98c. Metal case; plastic lens and hood. Lens well protected, but not of a type which is replaceable. Sharp edge of the case may very easily cut fingers when the lens hood is being removed or replaced. Bulb fits directly against battery terminal, an undesirable method of construction. Rolls too easily. Light output, good.

Eveready, No. 5251P (National Carbon Co., Div. Union Carbide & Carbon Corp.) \$1.19. Metal case; glass lens; plastic lens hood. Lens is well protected. Bulb fits directly against battery terminal, less desirable construction. Rolls much too easily. Light output, good.

**Hipco** (Hipwell Mfg. Co., Pittsburgh) 98c. Fiber case; rubber ends with metal inserts for threads (rubber ends are a good feature). Plastic lens, slightly recessed, but not replaceable. Rolls too easily. Light output, very good. Fiber case deteriorated greatly when the flashlight was submerged in water for a short time.

Usalite (United States Electric Mfg. Corp.) 98c.
Metal case; glass lens. Adjustable focus. Lens not
protected. Does not roll. Light output, fair on "spot,"
poor on broad beam (dark area in center of beam),
and some flicker.

Western Auto (Western Auto Supply Co., St. Louis, Mo.) \$1. Metal case; plastic lens and lens hood. Lens slightly recessed, but not replaceable. Adjustable focus. Bulb fits directly against battery terminal, less desirable construction. Rolls too easily. Light output, fairly good on "spot," poor on broad beam (dark area in center of beam).



The Remington Charge-A-Lite.

Remington Charge-A-Lite (Remington Rand Electric Shaver Div., Sperry Rand Corp., Bridgeport 2, Conn.) \$7.95. Plastic case and lens. Built-in charger renews batteries when the flashlight is plugged into an a-c outlet. This flashlight gives a large circle of very weak but very evenly distributed light. Batteries must be recharged after about 1 hr. of use when new, and light became pretty ineffective after about 20 charge-discharge cycles. Does not roll.

## A small portable fire extinguisher

A LITTLE PROTECTION can be as bad as no protection at all, perhaps worse. A homeowner who, realizing the dangers of fire, buys a convenient small fire extinguisher and then depends on it for emergency protection of his home against a beginning fire, may realize his mistake too late. While some small, low-priced extinguishers may be satisfactory for extinguishing very small incipient fires, they are effective for only certain types of fires and then only for those that are so small that other convenient means such as a basin or bucket of water might often serve better (except that water should not be used on burning grease or electrical fires).

In effect, most, if not all, of the small-sized fire extinguishers now on the market are sold with exaggerated claims, and the great danger of these small extinguishers is the likelihood that their owners will be led into a feeling of false security. There is danger with the aerosol spraytype carbon tetrachloride or CBM extinguishers in that poisoning may occur when the spray is accidentally directed into a person's face instead of in the direction of the fire. This actually happened in at least one case, and the poisoning that followed the accident was most serious.

One popular small fire extinguisher is sold under the name Fire Chief. This is a metal can containing a mixture of dry powder and liquefied Freon gas under pressure. The Fire Chief is designed along the familiar lines of the many aerosol products used for paint, lacquer, insecticides, and other common materials. In operation, the user presses a button and the extinguisher sprays out a cloud of powder much as an aerosol dispenser sprays out an insecticide or deodorant. The retail price of the Fire Chief is \$2.98 for a 12-ounce can. It can be used only once, as a single depression of the push button causes the spray to begin and to continue until the can is empty.

In tests conducted by Consumers' Research, the Fire Chief was found effective in extinguishing such a small and confined fire as could occur in an oven. For such limited purposes, this extinguisher might be satisfactory, since the fire would be a grease fire and would be confined to a small space. It was found that the total time of useful flow of the powder from the 12-oz. size of Fire Chief was about 7 to 10 seconds, which would often be insufficient. Unless the fire is extinguished within this short time, another extinguisher must be at hand for instant use, or the fire could get out of control.



As a general principle, consumers should avoid buying any sort of extra-small fire extinguisher, since no one has successfully combined adequate effectiveness with small size. Consumers should also avoid all extinguishers regardless of size, type, mechanism, or material used that do not have the listing or approval of the Underwriters' Laboratories, Inc., of Chicago, or the Inspection Department of the Associated Factory Mutual Fire Insurance Companies of Boston. Articles on various types of fire extinguishers and their use appeared in the August 1956 Consumers' Research Bulletin and in several earlier Bulletins.

#### C. Not Recommended

Fire Chief (Marlowe Chemical Co., Inc., New York City) \$2.98. Very small capacity (contents, 12 oz. of which one fifth is a fine powder, the extinguishing substance). Has limited value (see text). A 6-oz. Fire Chief is also available and, of course, is even less desirable for its purpose than the larger 12-oz. size. The labeling of the Fire Chief is objectionable. There is danger of poisoning because of the decomposition of Freon (said to be used as the propellant) into poisonous gases in the presence of flame and very hot surfaces; and the claim of handling all types of incipient fires (the underlining is on the label) is an exaggeration of what the device can do. Such a claim could not properly be made for even approved extinguishers of considerably larger size.



Examples of the three styles of mobile fans. At the left is a fan with a single air-directing orifice, in the center a high-air-velocity fan with five air-directors, and at the right a fan with none. The fan at the left, the Kenmore, is also available without the stand for window installation. The Westinghouse high-air-velocity fan in the center has a smaller but differently shaped fan blade and was about equivalent in air-moving performance to the larger 20-inch fans. The General Electric on the right is designed principally as an air circulator.

THE MANY different sizes, shapes, and varieties of electric fans on the market can be classed roughly in two groups—circulating and ventilating. A circulating fan, as the name implies, is designed primarily to keep the air within a room in constant motion. This air movement makes you feel cool because it promotes more rapid evaporation of perspiration from the skin, which is your own built-in cooling system.

A circulating fan does *not* cool the air in a room. To cool the air, it is necessary to employ an air conditioner or replace the warm air in the room with cooler air from the basement or from out of doors. A *ventilating* fan can be employed for this purpose. Naturally, it can do no good unless there is a supply of cool air available.

Fortunately, in most areas of the country, the outdoor temperature drops considerably at night, often 10 to 20 degrees or more. If the cool outside air is drawn into the house to cool off walls, ceilings, and furnishings, and the warm

inside air is pushed outdoors, the air change can make a home fairly comfortable for sleeping.

Probably the most efficient type of ventilating fan (excluding an attic fan) for night cooling is one which is mounted directly in a window (see listings). A window-mounted ventilating fan, however, should not be employed during the hot daylight hours since the most it can do will be to replace the air in a room or home with the still warmer air outside.

A portable fan or a mobile fan mounted on a stand with wheels offers an excellent compromise for all-around use in hot weather. During the warm daylight hours, the fan can be used in any part of the home as an air circulator; during night hours, it can be placed in front of a window and used as a ventilating fan to bring in the cooler outdoor air.

For a satisfactory cooling effect, the airmoving capacity of the fan should be sufficient to produce a complete air change in a room in 1½ minutes in the northern states and in 1 minute in southern regions. In very warm weather, an even higher rate of air displacement may be required. CR finds that the average 20-inch window fan tested, when used as a ventilating fan, would normally move sufficient air to cool two rooms, each 14 x 15 x 8 feet in a northern climate, and a correspondingly smaller space in the south. The average 20-inch mobile fan, if used as a ventilator, will likely be somewhat less effective.

There are a few simple rules that should be followed to get the best ventilating effect from a portable or mobile fan.

1. Open only the windows farthest from the fan in the rooms you desire to cool. This is to provide the longest possible path for the cool air moving toward the fan.

It may be well to close the windows in unoccupied rooms to obtain better air movement and cooling effect in the other rooms.

Turn on the fan as soon as the outside temperature has dropped two or three degrees below the temperature indoors, which will usually be after sundown.

To obtain the maximum cooling effect and to start off the next day with a cool house, operate the fan all night.

5. The fan should be positioned about 3 feet from and directly in front of an open window, so that it blows the air in the room *out* through the window. The fan should be placed so that it operates with the prevailing breeze; thus, if

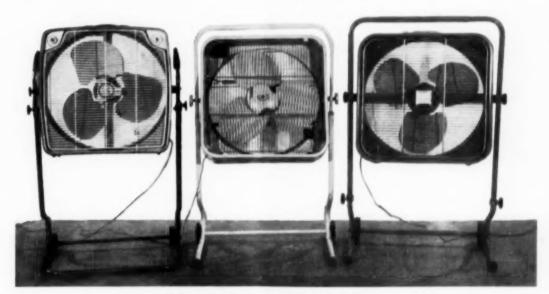
the wind usually blows from the south, mount the fan in front of a north window.

Bear in mind that a window screen will increase the resistance to air flow through a window opening and thereby decrease the effectiveness of the fan. For that reason, don't allow dirt or lint to collect on the screen.

The fans currently tested were all so-called "mobile" models with 20-inch blades, except the Westinghouse which had 17-inch blades. In many instances, a manufacturer will supply the same fan in two or three different models—portable or mobile, or for window use. Thus CR's measurements of air-moving capacities for the Montgomery Ward, Signal, Kenmore, and General Electric mobile models may properly be applied to the other models of portable or window fans that employ identical fan designs.

#### A. Recommended

Kenmore Roll-about, Model 480-8068-0 (Sears-Roebuck's Cat. No. 8077) \$56.50, plus shipping charges. Summer Sale Catalog, Cat. No. 8021, at \$50, plus shipping, appears identical. Stable, relatively quiet, and above average in air-moving capabilities. Instructions for use judged poor. The location was poorly chosen at which the electrical supply cord entered the fan enclosure. With prolonged use, there is a good likelihood that the wire in the cord will be exposed or broken with a consequent dangerous electrical hazard. ¶Portable fan Cat. No. 08068L, at \$44.50 (\$39, on sale), and window fan Cat. No. 9361, \$48 (\$43. on sale), appear to be similar.



Left to right: Montgomery Ward, Bob Irwin, Signal.

#### Summary of observations and tests

|                                    | Bob     | General<br>Electric | Kenmore | Montgomery<br>Ward | Signal  | Westinghous |
|------------------------------------|---------|---------------------|---------|--------------------|---------|-------------|
| Number of speeds                   | 3       | 3                   | 2       | 3                  | 2       | 2           |
| Electrically reversible            | No      | No                  | Yes     | Yes                | Yes     | No          |
| Cord length, feet                  | 10.0    | 9.8                 | 8.0     | 8.4                | 8.0     | 9.6         |
| Width of stand, inches             | 27.5    | 25.8                | 29.0    | 28.5               | 29.0    | 23.8        |
| Width of fan housing, inches       | 22.8    | 23.5                | 22.5    | 23.0               | 23.3    | *           |
| Height of fan housing, inches      | 22.8    | 23.5                | 22.3    | 23.1               | 23.3    |             |
| Weight with stand, pounds          | 33.1    | 33.5                | 37.8    | 38.2               | 40.3    | 34.2        |
| UL label                           | Yes     | Yes                 | Yes     | Yes                | Yes     | Yes         |
| Guarantee, years                   | 1       | 5                   | 5‡      | 5                  | 5       | 5           |
| Thermostatically controlled        | No      | No                  | Yes     | Yes                | No      | No          |
| Stability                          | Fair    | Good                | Fair    | Poor               | Fair    | Fair        |
| Ease of adjusting height           | Fair    | Good                | Fair    | Fair               | Poor    | Good        |
| Noise when running at high speed   | Consid. | Consid.             | Consid. | Consid.            | Consid. | Consid.     |
| Noise when running at low speed    | Mod.    | Mod.                | Low     | Low                | Mod.    | Low         |
| Comparative performance in         |         |                     |         |                    |         |             |
| Circulating air**                  | Avg.    | Avg.                | Avg.    | Avg.               | Avg.    | Good        |
| Exhausting air, high speed, c.f.m. | 1900    | 1675                | 2025    | 2100               | 2050    | 1950        |
| Exhausting air, low speed, c.f.m.  | 1125    | 1075                | 1325    | 1125               | 1500    | 1200        |
| Ease of handling                   |         |                     |         |                    |         |             |
| Room to room                       | Good    | Poor                | Good    | Good               | Good    | Good        |
| Up and down stairs                 | Poor    | Poor                | Good    | Fair               | Good    | Good        |
| Relative efficiency                | Low     | Avg.                | High    | High               | Avg.    | Low         |
| Adequacy of guards                 | Fair    | Poor                | Sat.    | Sat.               | Fair    | Unsat.      |
| Operating cost†, cents             | 85      | 60                  | 60      | 60                 | 70      | 100         |
| Wheels mark floor?                 | Yes     | No                  | No      | No                 | No      | No          |

Mod.—moderate; Avg.—average; Sat.—satisfactory; Unsat.—unsatisfactory; c.f.m.—cubic feet per minute; Consid.—considerable.

Not readily mounted in window.

Based upon measurements of thrust.

Based upon measurements of thrust.

Based on 100 hours of operation at high speed, with electricity at 3.5 cents per kilowatt-hour.

Five years on motor, one year on other parts.

Westinghouse Mobilaire, Model MA-4020 (Westinghouse Electric Corp., Springfield 2, Mass.) \$79.95. Stable, relatively quiet, above average in air-moving capabilities, and ruggedly constructed. It is possible for a child to insert his fingers between the air-directing cones, so as to come into contact with the blades, a dangerous hazard. The user should take precautions, too. to prevent the appliance cord from falling in this space; if it should catch here, the result might be a fire and shock hazard. Excellent instruction book. ¶ Model 4021, at \$69.95, appears almost identical.

#### B. Intermediate

Montgomery Ward Automatic Rellabout, Model VSR-2466A (Montgomery Ward's Cat. No. 2460 R) \$52.50, plus shipping. Available in Midsummer Sale

The four-position turn-switch on the Bob Irwin fan (left) had no identifying markings or other means to indicate the fan speed or the "Off" position. The switching arrangement on the Signal (right) was well marked and readily understood.





Catalog at \$46.77, plus shipping. On the whole, the fan was very satisfactory, but the stand was unstable and difficult to adjust in height. Instructions for use judged poor. ¶Portable fan Cat. No. 2466 MO, at \$42.50 (\$37, on sale), is identical and merits an A-Recommended rating.

Signal, Model RS-20 (Signal Electric Div., King-Seeley Corp., Menominee, Mich.) \$77.50. On the whole, the fan was very satisfactory, but the stand was less stable than some others, and the operating noise at low speed was slightly greater than with the Kenmore, Montgomery Ward, or Westinghouse mobile fans. Instructions for use judged fair. The fan, purchasable without stand as a portable model, at \$57.50, merits an A-Recommended rating.

#### C. Not Recommended

Bob Irwin, Cat. No. 7-328 (Kemco Industries, St. Louis 16) \$49.95. This brand may not be widely known but we believe it may be widely sold in some department stores or other outlets, perhaps used as a promotional item. The stand was of relatively poor design, and the performance of the fan was only fair. No instructions for use were supplied.

General Electric, Model P-2 (General Electric Co., Bridgeport 2, Conn.) \$59.95. The stand was the most stable, but the fan was the most awkward to move about of any tested. Air-moving performance of the fan was below average. Good instruction book. Previous Model P-1 is similar in appearance but has a sheet-metal band around the circumference of the fan which should improve performance.

The following window ventilating (exhaust) fans were tested and reported on in the June 1955 BULLETIN. The same or similar models are available as noted. All fans in the listings were 20 inch, except as noted.

#### A. Recommended

Emerson, Cat. No. 76310-R-3 (The Emerson Electric Mfg. Co., 8100 Florissant Ave., St. Louis 21) \$85 Well-constructed fan, reversible by turning a switch Excellent air-moving capacity (2500 cu. ft. per min.) and above average efficiency. Had a slightly higher noise level on high speed than other fans in the test.

The following were considered not quite equal to the above in one or more respects.

Diehl, Cat. No. B20WP16 (Diehl Mfg. Co., Somerville, N. J.) \$69. A fan of high efficiency, reversible by turning a switch. Air-moving capacity, 2200 cu. ft. per min. Because of insufficient guarding of the blade, this fan is considered undesirable for use in homes with young children. \*Current Model D20WP16, at \$55, appears to be similar.

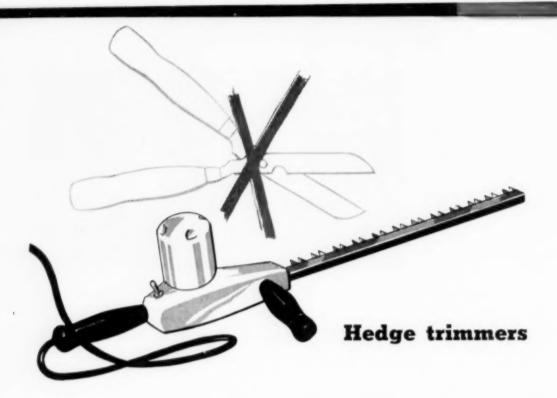
General Electric, Cat. No. T2 (General Electric Co... Bridgeport, Conn.) \$65. Twin 12-in. fan of average efficiency. 1500 cu. ft. per min. Manually reversible Portable. Can be used in suitably sized casement windows. ¶Current Model T3, at \$60, appears to be similar.

General Electric, Cat. No. W1 (General Electric Co.) \$70. Window fan of average efficiency. 2100 cu. ft. per min. Manually reversible. Portable. ¶Current Model W4, at \$70, appears to be similar except that it is reversible by turning a switch.

Westinghouse, Cat. No. WF-2520 (Westinghouse Electric Corp., Springfield 2, Mass.) \$70. Non-reversible fan of average efficiency. 2300 cu. ft. per min. Blade guard insufficient for protecting fingers; would offer a definite hazard in homes with young children.

#### C. Not Recommended

Dominion, Model 2050 (Dominion Electric Corp., Mansfield, Ohio) \$19.



# Includes information on safety precautions necessary with any electrically-powered tool used outdoors

FOR MANY A HOMEOWNER, the hardest and most tedious garden job is the trimming of hedges and shrubbery with a pair of hand-powered hedge trimmers. Electrically-operated hedge trimmers make light work of this chore, for even a novice, with a little practice, can turn out a well-trimmed hedge in a fraction of the time-and likewise a fraction of the muscle-weariness-required for hand trimming. There is a certain amount of hazard in using a hedge trimmer, as there is with nearly all power tools, but the problem is worse with hedge trimmers than some other tools, because there is no way in which the cutting blades can be guarded and at the same time be free to do their work effectively. Some manufacturers have been more resourceful in providing safety in their designs than others. Two makers, for instance, employ switches of a type that must be held down to stay in the "on" position. When such a switch is released, the motor stops quickly and the blades are no longer a menace. Unfortunately, one of the makes that had this type of switch was unsafe electrically; it showed high leakage current and failed the proof-voltage test.

There is a safety factor involved also in the placement of handles on the tool. If the handle for one hand is placed on the cutting side of the blade, the operator must stand on this side, which is a potentially dangerous position in the event the operator should slip or fall or something should occur (electrical shock, for example) that would make him start suddenly or lose his balance. On two hedge trimmers tested (Central and Shopmate), the handles could be unscrewed from one side and screwed into the other side.

#### **Electrical safety**

A good many electrical appliances should be grounded for safety; this requirement is particularly important with electrically-powered tools or devices which are used outdoors. To provide for the necessary grounding, some manufacturers use a three-wire power cord fitted with a special three-prong plug and a matching adapter fitting a standard two-slot household socket. It is strongly urged that, instead of using an adapter for any electrical tool with a three-prong plug, a special three-opening

receptacle designed for use with this type of plug be installed. This should be done by a competent electrician who should be instructed to make certain that there is a good and permanent ground connection from the box. If the adapter is used, its loose wire must be connected securely to an electrical ground, which may be the receptacle box if it is known with certainty that the box is properly grounded. Unfortunately, the design of the adapters supplied with the hedge trimmers left much to be desired. All were made of breakable plastic. The adapter itself could introduce a serious shock hazard if the flexible grounding wire to the receptacle box should not be securely fastened and came loose or if the operator failed to connect this wire to the box. If the latter mistake occurred, the short grounding wire itself could touch one of the prongs of the adapter and make the housing of the tool live, introducing a most serious shock hazard. Because the hedge trimmer manufacturers supply only a short cord with their machines, and hedges are often long and some distance away from the nearest power outlet, it is necessary to use an extension cord. A three-wire extension cord must be used with an appliance fitted with a three-prong plug in order not to lose the safety value intended to be afforded by the three-prong plug. Some of the hedge trimmers tested were fitted with two-conductor cords with no provision for grounding. Any appliance with a two-conductor cord is hazardous for outdoor use.

Three-wire extension cords should be fitted with molded-on unbreakable plugs and connectors permanently attached to the wire to prevent all possibility of a mistake in wiring which might take place later if someone not familiar with the electrical principles involved should attempt a repair. (Sears, Roebuck & Co. offer a 14-gauge three-wire rubber-covered extension cord, 25 feet long, for \$6.25, plus postage, Cat. No. 34—5882. A lighter weight, 16-gauge three-wire cord, 50 feet long, is \$5.29, Cat. No. 34—5877.)

If the user of a hedge trimmer decides to make up a three-wire extension cord himself from three-wire rubber-covered cord, he must use the greatest care in wiring both the plug (cap) and the connectors to be sure that he does not connect the ground lead to the terminal which itself is connected to the live side of the line. If he should make this mistake, the frame of the hedge trimmer would be live—and very dangerous—at 120 volts, and the three-wire extension cord instead of being a safeguard would become the source of an extreme danger.

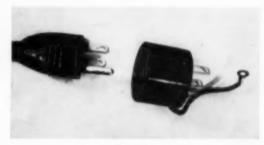


Figure 1

Three-prong plug at left and the adapter plug which permits connecting this special plug into a standard 2-hole socket. The flexible wire is connected for grounding to the metal outlet box by means of the screw on the cover plate. It is, of course, important to make sure the box itself is grounded. See also text and Figure 2.



Figure 2

Failure to connect the flexible grounding wire as intended, to the outlet receptacle box, may introduce a serious hazard, as the short grounding wire may touch one of the blades of the adapter as shown above and become "live," thus making the tool housing live, and very dangerous, when the adapter is plugged into the power outlet. Note also the broken plastic housing, this should have been made of more nearly unbreakable material of the nature of vulcanized rubber.

Flexible wire of 16 gauge can be used for extensions up to 200 feet, and 14-gauge wire is satisfactory up to 300 feet for appliances using up to two amperes. (The use of too light an extension cord is not only hazardous; it lowers the efficiency of an appliance and may cause it to be damaged.) All extension cables should be inspected frequently and, if in damaged or poor condition, should be replaced immediately. Any defective wiring out of doors involves hazard of shock of an especially dangerous sort which may cost a life. The danger is particularly great when the ground is wet or damp. The careful homeowner will prefer to wear rubbers or galoshes and dry leather gloves when doing a hedge trimming job. Such precautions are specially necessary with two-wire ungrounded trimmers, but are advisable with any electrical appliance used out of doors. There can be no assurance that an appliance which is safe at one



Figure 3
Switch on the Duwel must be held in "on" position to keep
the trimmer in operation. When the switch is released, the
blades stop. A well-designed switch of this type would be a
desirable safety feature

time may not develop an electrical hazard at another, without warning; besides, accidents sometimes occur by which the wire itself is cut, in which case there is extreme danger of shock.

All of these tools require cleaning and oiling of the cutters after each use. Occasional replacement of gear box lubricant may be needed. Universal (ac-dc) motors will require new brushes from time to time. It is very important to read and follow carefully the manufacturer's maintenance instructions. If a parts list is supplied, preserve it; you are pretty likely to need it later on.

#### A. Recommended

Craftsman, Model 207-17041 (Sears-Roebuck's Cat. No. 9—1704) \$42.95, plus postage. Weight, about 6 lb. 12-in. blade. Universal (ac-dc) motor rated at 2 amp. Had 3-wire cord. 8 ft. long, with grounding plug. The



Figure 4
The upper handle of this hedge trimmer was adjustable.

upper handle is adjustable to three positions, upright, and 45° and 90° to the right. The other handle was located on the same side as the cutting edge of the blade. (This position is undesirable, see text.) Metal toggle switch conveniently located near handle. Well balanced. Moderate vibration. The Craftsman was ranked second choice in CR's use test. UL label. Good instruction booklet.

Little Wonder, Model 16 (Schiller-Pfeiffer, Inc. Southampton, Pa.) \$54.40. Weight, about 5¾ lb. 15-in. blade. Universal (ac-dc) motor rated at 1.2 amp. This trimmer differs from others tested in that both blades oscillate (see Figure 5). Had 3-wire cord. 5¼ ft. long, with grounding plug. Metal toggle switch conveniently located near rear handle for easy access. Well balanced. Very little vibration. In actual use tests in trimming of privet hedge, the Little Wonder was judged easily the best of the brands tested. No operating instructions. Lubrication instructions on tag. 3

#### B. Intermediate

Central, No. C-604 (Central Stamping & Mfg. Co. Polo, Ill.) \$29.95. Weight, about 4½ lb. 10-in. blade. A-c motor rated at 1.8 amp. Had 2-wire cord about 1 ft. long, with no provision for grounding. (Provision for grounding is desirable; see text.) Metal toggle switch, located under top handle, somewhat inconvenient to operate. On and off positions not marked. Side handle could be screwed into place on either side. Well balanced. Vibration, somewhat above average. Operated satisfactorily in the use test. UL label. Instructions very sketchy.

Shopmate, Model 1301 (Portable Electric Tools, Inc., Chicago 20) \$29.95. Weight, without cord, about 4½ lb. 10½ in. blade. A-c motor rated at 1.6 amp. Had 3-wire cord about 7 ft. long, with grounding plug. On-off toggle switch with plastic knob located near top handle. On and off positions not marked. Side handle could be screwed into place on either side. The trimmer was well balanced. Showed only moderate amount of vibration; it operated satisfactorily but was more tiring than the A-Recommended hedge trimmers in CR's use tests. UL label. Good, detailed instructions with respect to electrical safety and proper maintenance of the tool. Operating instructions, sketchy.

Hedgshear, Model 103R (Porter Cable Machine Co., Syracuse 8) \$58.50. Very similar to Hedgshear Model HT previously tested by CR, and given hard use since. Weight, about 6 lb. Universal (ac-dc) motor rated at 2.5 amp. Had 2-wire cord, 10 ft. long, with no provision for grounding. Metal switch conveniently located on underside of handle was of the type that, when released, stops the motor (desirable from a safety standpoint). A locking device was provided to hold the switch in the "on" position if desired. Action like that of a chain saw, with a chain-type blade running in one direction, instead of back and forth. This design provides two cutting surfaces, each about 14 in. long.

permitting the machine to cut either way, toward left or right. Tip of blade support extended about 1½ in. beyond cutting knives. This inactive section tended to catch in the uncut part of the hedge, making it difficult to guide the blade evenly over the hedge. 3

Skil Trimmer, Model 512, Type 1 (Skil Corp., Chicago 30) \$49.75. Weight, about 5½ lb. 12-in. blade. Ac-dc motor rated at 2 amp. Had 2-wire cord about 6½ ft. long, with no provision for grounding (undesirable). Metal toggle switch conveniently located near rear handle. Upper handle adjustable up to more than 90° either way from center position for right-or left-hand trimming. Well balanced. Vibration. moderate. Operated satisfactorily in the use test, but slowed down somewhat under heavy loads. UL label. Good instruction book, but no parts list was supplied.

Sunbeam, Model A-1-A (Sunbeam Corp., Chicago) \$46.75. Weight, about 4½ lb. 12-in. blade. Ac-dc motor rated at 0.6 amp. Body and housing of plastic and light-metal alloy. Sliding switch with bakelite push button, well marked. Had 9-ft. 2-wire cord with no provision for grounding. Cord of bright red color was easy to see, and this reduced the likelihood of accidental cutting of the cord. On and off switch conveniently located on motor housing. Very well balanced. Had considerable vibration. Operated satisfactorily on new growth of hedge, but on heavier old growth was somewhat underpowered, as would be expected from the low consumption of electricity by the motor. Good instruction book.

#### C. Not Recommended

Duwel HT-100 (Duwel Mfg. Corp., Chicago 8) \$39.95. Weight, about 4½ lb. 12-in. blade. Ac-dc motor rated at 1.7 amp. Had 2-wire cord, 16 in. long, with





Figure 5
Sections of the blades of two types of hedge trimmers. Top—both blades move back and forth. Bottom—blade at front oscillates, blade at rear remains stationary.

no provision for grounding (undesirable). Metal switch located near rear handle must be held in "on" position; when it is released, motor stops. (This, when properly designed, is a very desirable arrangement from a safety standpoint.) In the Duwel HT-100 trimmer, however, it was necessary to grasp the metal housing instead of the insulated handle to operate the switch. The design should be such that the trimmer can be firmly held and used by holding onto insulated handles only. Rear handle too small to provide comfortable grip. The tool failed to pass the high-voltage test for electrical safety. UL label. No instructions or parts list were received.

### Note to our readers

WHEN YOU WRITE Consumers' Research for advice or information, we request that you enclose a ready-addressed, stamped envelope for reply. We regret that there can be no assurance that letters asking for special service on questions about products, appliances, and other subjects not directly connected with subscriptions will be answered promptly, since the carrying out of tests and preparation of new material for the BULLETINS must necessarily take precedence

over inquiry correspondence. While inquiries will be answered as fully as possible, it should be noted that Consumers' Research receives more letters about products than we can possibly answer with the degree of completeness and detail we should like to provide.

Correspondence on subscription matters should be on a separate sheet from letters on other topics, since the two kinds of correspondence are handled in different departments.

#### FAT in the diet

(Continued from page 2)

was a rarity in middle age before 1920, it has now become by a wide margin the leading cause of death in age groups of men from 45 years on. (The death rate for heart disease is around three times that for cancer, the second great cause of death in the U.S.) "It is more dangerous to be a man between the ages of 45 and 65 in the United States than it is in any other country in the world," says Dr. Norman Jolliffe, eminent Director of the Bureau of Nutrition of New York City. The deposits of fat-like substances in the arteries that constitute atherosclerosis are characteristic of North America; few in our land are completely free of it.

#### Hydrogenation process adopted by food industries

We have reason to believe that high among the causes of the alarming increase in the death rate from coronary disease was the wide adoption by the shortening industry of hydrogenation or hardening of soft and liquid fats, to make them into firm plastic solids. Hydrogenation became a widespread manufacturing practice about 40 years ago, and its universal adoption by food producing industries has represented one of the major dietary changes of modern times, correlating well with the change of atherosclerosis from a disease of minor importance to its position as the chief cause of death in adults. For manufacturers, hydrogenation is a great convenience, for it improves the appearance and color of fats that would otherwise be considered unsuitable for sale to consumers, because of poor color or rancid odor or flavor, and it



Solid cooking fats

Crisco, Spry, Cream White, and Fry-Bake are all hydrogenated vegetable oils. The lard is, of course, hog fat. The other three, Fluffo, Swift'ning, and Bake-Rite are mixtures of meat fats and treated vegetable oils (kinds not specified). In the case of Fluffo, the vegetable oils and meat fats are stated to be hydrogenated.



Of these salad and cooking oils, the first is cottonseed oil; the second is peanut oil; the third contains 90 percent of a mixture of corn oil and peanut oil, with 10 percent olive oil; the fourth is a mixture of corn and cottonseed oils; the fifth is treated cottonseed oil; the sixth is straight corn oil.

hardens liquid and soft fats in a way to make them more convenient for the preparation of food in the home, restaurant, bakery, and food factories in general. Important, too, is the fact that the hardened fats have a high degree of "durability" and resistance to change and deterioration with time and lack of refrigeration. They are incomplete foods, that supply "dead" or "empty" calories, capable of providing energy or "fuel values," but they are deficient in subtle essential substances (vitamins, minerals, and unspoiled proteins) needed for vigor and to help insure long life.

#### Saturated fats vs. unsaturated

Recent research has shown that the blockage of the free, normal flow of blood which occurs in coronary heart disease is associated with deposits of substances chiefly derived from the "saturated" fats of meat, and from the hardened or hydrogenated cooking fats, which consist almost entirely of what are known as "saturated" fatty acids.

Everyone who desires to ward off heart disease with which Americans even in middle age are almost universally afflicted to some extent, and especially every one in whose family heart disease has been a problem or has caused untimely deaths, should give thought to using a good deal less fats and fatty foods. The calories from fat should not exceed 20 to 25 or 30 percent of total calories consumed. This means. for the average American, substantially reducing his consumption of fat, since Americans who can afford to "eat well" are following a diet in which approximately 40 percent of the calories are from fat. This is the typical American's diet that one great heart specialist refers to as "gluttonous, up to the time of their coronaries, anyway."

It will be important, for many people, to reduce the use in home cooking of butter, cream, margarine, and the hardened shortenings—the

kinds that come in solid form in cans—and to substitute, where fat is necessary, unhydrogenated liquid fats consisting mainly of *unsaturated* fatty acids, such as corn oil, olive oil, sunflower seed oil, cottonseed oil, and soybean oil. Corn oil, for instance, may actually *lower* the blood cholesterol level, rather than raising it as most common fats do.

Dietary habits involving the use of hydrogenated fats, and saturated fats (other than those in meat), are a development of recent years, and such foods are distinctly a novelty, and an untested novelty, in the long history of the human race and its dietary practices.

Fortunately there are good substitutes for fat meats, chiefly in meats of the lower grades, not "Prime" or "Choice" such as are served in fine restaurants, but those which have far less fat on the edges to be trimmed off and are less heavily "marbled" with fat.

The protein-hungry man has a wide variety of lean meats and fish and seafood to fall back on, for the fats and oils in non-fatty fish and seafood are limited in amount, and are believed not to contribute to coronary disease. Some fish and seafood low in fats are: cod, flounder, sea bass, trout, sole, clams, scallops, oysters, shrimp, crabs, and abalone.

#### Fats for cooking and baking

The two kinds of cooking fats can usually be distinguished without difficulty. The non-harmful unsaturated fats are liquids at room temperature; the saturated fats are solid. The fats of meat, poultry, egg yolk, butter, cream, whole milk, hardened fats of all kinds (the kinds most used in cooking, and in factory preparation of packaged, canned, and frozen foods) are the foods whose consumption in large and increasing quantities is now held to be most directly related to heart disease.

#### What to eat to prolong life

Instead of the overfattened meats, graded high by government agencies and by the packers and butchers, use lean meats and lean chicken, and see that all visible fat is carefully removed from meat and chicken, and discarded. Especially desirable among meats are beef, yeal, or lamb, sirloin and round, of the cheaper grades, rather than porterhouse, tenderloin, and other fat, wellmarbled cuts. Use more fish (of the non-fat types). Remember that even with visible fats removed, beef and pork, chicken, duck, and goose contain a considerable proportion of fat which is distributed through the tissues in such a way that it cannot be separated out and discarded. This is especially true of the higher-grade prime and choice meats: the feeding of cattle and hogs to produce deposits of fat and "marbling" of steaks, roasts, and chops has been accepted practice for many years.

One should avoid, as far as possible, the eating of ham and bacon and other forms of pork; likewise the fatty fish-mackerel, salmon, herring, sardines, and pilchards. Many persons should carefully limit their consumption of gravies and sauces, rich soups, salad dressings, pie and pastries, ice cream, egg yolks, chocolate, and nuts. Do not fry meat in fat or butter, and avoid all "French-fried" foods. Instead of fried meats and fish, use more broiled lean meat and broiled non-fat fish and poultry, with the fat carefully trimmed and drained off. (Some fish are very good boiled or "poached.") Frying, though nowadays greatly favored because of its convenience and speed, particularly in quick-service restaurants, is the least desirable of all the cooking processes. Foods prepared by baking, roasting, broiling, and boiling are more wholesome than those that are fried, and broiling is best, in most cases, where applicable.









Desirable types of cooking and salad oils made entirely or chiefly of unsaturated types of oil—used, to the exclusion of other types of cooking fats, by many persons of Italian origin living in the  $U.\,S.$ 





Showing how much fat the consumer gets—at meat prices—when he buys beef steaks and roasts, especially when the meat is of "high grade." On the steak shown, the surprising proportion of 30 percent of the weight is separable fat. (Separable fat and bone together were nearly 55 percent of the original weight.) There's a good deal more fat interspersed in the body of the meat that one cannot avoid eating, in this type and grade of steak.

All of these precautions are important for boys and men at every age, and for women past the menopause, especially in families where there have been illness or death from heart disease and diseases of the circulation.

Do not eat foods cooked in fats that have been heated to high temperatures. Take great pains to cut off and discard all charred, blackened, or burned portions of roasts, steaks, chops, and other fatty foods.

#### Use of salt should be minimized

Overuse of salt is likely to be a contributing factor also in heart disease, and on that account it is best to restrict one's intake of salt so far as practicable to the salt that is natural to the food itself, and not to add salt at the table.

#### Some questionable foods discussed

Since some vegetable oils are potentially harmful because of having been partially hydrogenated, and containing chiefly saturated fatty acids, one will be wise to use to the least extent practicable shortenings and products such as ready-prepared foods and mass-produced cakes and pastries, of which the labels refer merely to "vegetable oil" or "shortening," and do not name the oil used or state whether it has been hydrogenated.

The fat in milk is not a liquid fat, as one is likely to assume, but a dispersed solid fat of a high degree of saturation. Skim milk (or "dried non-fat milk") can be used to advantage for cooking by those who want some form of milk in their diet.

It is wise to use with restraint ready-mixed or frozen and other ready-for-the-oven and ready-to-heat-and-serve foods, almost all ready-prepared foods, since such foods are commonly made with processed fats. Ready-to-heat packaged foods made with meat, fish and seafoods, ready-to-the-oven bread, biscuit, cake, and pie crust mixes, fried chicken, "French-fried" potatoes and onions, and the like are usually among foods that are now considered likely to increase any existing tendency toward heart disease.

With the reduction of fat in the diet, there should be an increased use of foods which are predominantly *protein*, which means in practice lean meat, non-fat fish, natural (not processed) cheese of the low-fat type (which means principally cottage or "farmer cheese").

Remember that the heart disease epidemic is a real one, that may strike down a father, brother, or beloved friend in his prime, even in youth.

Your doctor is the one to be consulted on all matters connected with health, and particularly conditions affecting the heart or circulation, and his advice should be sought on the details of food selection. Anyone who has or thinks he has symptoms of incipient heart disease should consult a good physician, submit to the required tests, and follow the doctor's advice faithfully.

The general principles set forth in the foregoing article are well established. You may rely upon their correctness so far as scientific knowledge of the present day goes. New knowledge developed by able medical researchers will quickly fill in important gaps in the information. As time goes on, practicable and workable ways of altering our food supply and its preparation will surely be worked out by highly trained researchers, and means made available by which all who wish to do so may guide their food selection by this vital new knowledge of nutritional science.

Space limitations permitted us to present in this article only a very small part of the information we would wish to include. If you would like to read more about the problem of fat in the diet and what can be done about it, let us hear from you.

#### OFF THE EDITOR'S CHEST

(Continued from page 5)

daily newspapers in certain sections of the country.

District attorneys in several large cities have secured indictments for conspiracy and false advertising against advertisers using such techniques. One of the most recent cases occurred last spring in Kings County, New York, where the Grand Jury handed down indictments against five men and three corporations involved in "bait" advertising of sewing machines. The district attorney handling the case reported that, as a result of advertising a \$29.50 offer, mostly on television, one company sold in a year's time 856 machines for \$156,000, an average of \$170 each. Only one persistent purchaser had managed to get one of the \$29.50 bargains, and she had to call in the police to help her.

The misuse of the Singer name as a "comeon" to secure prospective customers for sewing
machines has been so flagrant that the Singer
Manufacturing Company and the Singer Sewing
Machine Company have filed injunction suits
to prevent deceptive use of their trade-marks
and copyrighted literature. In some cases, old
Singer machines of the treadle type have been
rebuilt with parts not made by Singer and the
sewing heads have been refinished to look like
more recent models.

Television servicing is another field in which "bait" advertising offering to make a service call for a low figure from \$1 or \$2 is a technique for enabling a serviceman to get a look at a set and then claim the repair is so complex that he must take it to the shop where he can use the special equipment needed. The set owner will often be obliged to pay a sizable ransom of \$20, \$30, or even \$100 in some cases to get the set back and in working order. It is well to keep in mind that the basic charge for a house call by a reputable TV repairman runs from \$4 to \$5. The wise consumer will not be taken in by any so-called bargain rate.

Rebuilt vacuum cleaners sold by "bait and switch" advertising, particularly on television, frequently use the name "Electrolux" as the "come on" to secure permission for a salesman to get into a home for a demonstration. The names of "General Electric" and "Hoover" have also been used in connection with rebuilt vacuum cleaners advertised as low as \$11.95.

Extensive activity on the part of several Better Business Bureaus in cooperation with several magazines of large national circulation has acquainted consumers with the pitfalls in the used vacuum cleaner field, but only a few years ago the Electrolux Corporation, like the Singer Manufacturing Company, was obliged to take legal action in several sections of the country for protection against the featured use of its name and trade-marks in "bait" advertising.

There are undoubtedly bargains to be had in rebuilt sewing machines and vacuum cleaners and other items, but how to tell the good from the bad is a bit of a problem. In large cities where there is a Better Business Bureau, it is advisable to check to see whether the shop at which a purchase is contemplated is on the Bureau's books as the subject of a large number of complaints from dissatisfied customers. One of the first tests of the authenticity of an offer is whether or not you are readily shown the advertised bargain. If there is none available, or the salesman shows reluctance, turn on your heel and walk out. Be especially suspicious if you arrive early in the morning and are told that the supply of the product advertised is all sold out. Don't linger to be worked over and under no circumstances give your name and address. You will save yourself needless annoyance and pressure by looking over bargain items of this type in the shop that offers them for sale rather than allow a salesman to call on you at home.

If the salesman not only shows reluctance in demonstrating the machine advertised, but goes to considerable length to disparage it, suggesting that it is too cheap and you wouldn't be satisfied with it anyway, don't let him show you "something better," i.e., more expensive. Pressure to buy another make or model is a sure sign that you have been "baited."

Whether you buy or not, it is wise to report any experience with a "bait" advertiser to the nearest Better Business Bureau. In some sections of the country, the Better Business Bureau has been quite effective in cleaning up the more blatant claims. The Chicago Bureau has even been able to secure published correction of some misleading claims, particularly in the used car field.

Certainly, if you have been victimized by such tactics, you should complain long and loudly to the station or newspaper that accepted the advertising, to the district attorney, to the Better Business Bureau, the Chamber of Commerce, and the Federal Communications Commission. If you do a good job, you may be able to save other consumers from being taken in by the same racket.

# Ratings of Motion Pictures

| THIS section aims to give critical consumers a digest of opinion from a wide range of mo- |
|---|
|   |
| tion picture reviews, including the motion pic-   |
| ture trade press, leading newspapers and maga-  |
| zines—some 19 different periodicals in all. The   |
| motion picture ratings which follow thus do not   |
| represent the judgment of a single person, but  |
|   |
| are based on an analysis of critics' reviews.   |
| The sources of the reviews are:   |

The sources of the reviews are:
Boxofice, Cue. Daily News (N. V.), The Exhibitor, Films in Review,
Harrison's Reports, Joint Estimates of Current Motion Pictures, Motion
Picture Herald, National Legion of Decency, Newsweek, New York
Herald Tribune, New York Times, The New Yorker, Parents' Magazine,
Release of the D. A. R. Preview Committee, Reviews and Ratings by the
Protestant Motion Picture Council, The Tablet, Time, Variety (weekly).

The figures preceding the title of the picture indicate the number of critics whose judgments of its entertainment values warrant a rating of A (recommended), B (intermediate), or C (not recommended).

Audience suitability is indicated by "A" for adults, "Y" for young people (14-18), and "C" for children, at the end of each line.

| ioi cinidien, a | t the end of ea | ren mue | *        |
|-----------------|-----------------|---------|----------|
| Descriptive     | abbreviations   | are as  | follows: |

B

| adv adventure<br>biog biography<br>c-in color (Ansco, Eastman, Techni-<br>color, Trucolor, Warner Color, etc.) | mel melodrama mus musical myr mystery mor dramatization of a novel |
|--|--|
| com comedy ori crime and capture of criminals  | rom fomance  tot science fiction  toc social problem drama         |
| doc documentary<br>dr drama<br>fam fantasy   | war dealing with the lives of<br>people in wartime                 |
| hist-founded on historical incident  | wes western  |

|       | 2.0 | 4.0 |  |
|-------|-----|-----|--|
| -     | 9   | 3   | Abandon Ship! (British)dr A              |
| -     | 11  | 4   | Above Us the Waves (British), war-dr AYC |
| -     | 3   | 2   | Accused of Murder cri-mel-c A            |
| -     | 2   | 2   | Affair in Reno mel-c A                   |
| -     | 1   | 3   | African Manhunt mel A                    |
| 1     | 12  | 2   | Albert Schweitzer biog-c AYC             |
| 5     | 7   | 4   | Anastasia                                |
| -     | 3   | 4   | Attack of the Crab Monsters sci AY       |
|       | 2   | 1   | Baby and the Battleship, The (British)   |
|       | 3   | 3   | Badlands of Montana wes A                |
|       | 2   | 2   | Bailout at 43,000 war-mel AYC            |
| 2     | 9   | 6   | Barretts of Wimpole Street, The dr-c A   |
| 2     | 6   | 9   | Bachelor Party, Thedr A                  |
| 2 2 2 | 13  | 2   | Battle Hymn biog-c AYC                   |
| -     | 2   | 2   | Beau James biog-c A                      |
|       | _   | 3   | Beautiful But Dangerous dr A             |
|       | 3   | 2   | Beyond Mombasa (British) mel-c AY        |
| _     | 8   | 8   | Big Boodle, The cri-mel A                |
|       | 5   | 5   | Big Caper, The cri-mel A                 |
|       | 2   | 3   | Big Fun Carnival, The car AYC            |
|       | 8   | 7   | Big Land, The wes-c AYC                  |
|       | _   | 3   | Bitter Spears doc-dr-c A                 |
|       | 1   | 9   | Black Whip, The wes A                    |
| _     | 2   | 7   | Blonde Sinner, The (British)dr A         |
| 2     | 10  | 5   | Boy on a Dolphin mel-c A                 |
| 2     | 3   | 2   | Brass Legend, The wes A                  |
| -     | 1   | 3   | Break in the Circle (British)war-dr A    |
|       |     |     |  |

| _ | 3   | 10  | Burglar, The  |
|---|-----|-----|---|
| _ | 3   | 2   | Calypso Joe   |
|   | 4   | -   | China Gate war-mel A  |
| - | 3   | 10  | China Gate war-mel A Counterfeit Plan, The (British).cri-mel A Crime of Passion mel A                                       |
| = | 4   | 4   | Cruel Tower, The  |
| = | 3 2 | 9 2 | Dance with Me Henry   |
| - | î   | 4   | Deadliest Sin, The (British) cri-mel A  |
|   | 3   | 4   | Deadly Mantin, Thesci AYC   |
| 2 | 2 7 | 8 7 | Designing Woman com-c A   |
| 1 | 5   | _   | Desk Set  |
| 1 | 4   | 3   | Devil's General, The (German) war-dr A  |
| _ | 3   | 1   | Don't Knock the Rock mus-com AYC Dragatrip Girl mel A   |
| 1 | 5   | 3   | Dragoon Wells Massacre 1963-c AYC   |
| _ | 6   | 4   | Drango mel A Duel at Apache Wells wes AYC   |
| 1 | 10  | 5   |   |
| - | -   | 6   | Edge of the City  |
| 5 | 10  | 3 2 | Fear Strikes Outbiog AYC  |
| - | 8   | 5   | Fighting Trouble  |
| - | _   | 5   | Flesh and the Spurwes-c A   |
| - | 2 8 | 9   | Four Boys and a Gun soc-dr A  |
| _ | 4   | 2   | Four Girls in Town  |
| 2 | 13  | 3   | The   |
| 8 | 9   | 1   | Funny Face  |
| - | 5   | 3   | Fury at Showdownwes A   |
| 1 | 5 8 | 6   | Garment Jungle, The doc-mel A   |
| - | 2   | - 1 | Girl Can't Help It, The mus-mel-c A<br>Girl from Corfu (Greek) com-c AYC  |
| - | 2   | 5 2 | Girl in the Kremlin, The mel A<br>Glass Tomb, The (British) dr A  |
|   | 10  | 3   | Gold of Naples, The (Italian) dr A  |
| _ | 1   | 4   | Cun Duel in Durando   |
|   | 11  | 2   | Gun for a Cowardwes-c AYC   |
| 1 | 4   | 1   | Gunfight at the OK Corral wes-c A   |
|   | 8   | 3   | Gun for a Coward wes-c AYC Gun the Man Down wes-c A Gunfight at the OK Corral wes-c A Guns of Fort Petticoat, The wes-c AYC |
| _ | 5   | 5   | Halliday Brand, The wes A   |
| 7 | 8   | 1   | Happy Road, The   |
| _ | 4   | 5   | Hellcats of the Navy war-dr AYC   |
| 7 | 2 2 | 1 3 | Hell's Crossroads wes-mel A High Terrace (British) mys-mel A Hit and Run cri-mel A  |
|   | 1   | 5   | Hit and Run cri-mel A   |
| - | 1   | 2   | Hold That Hypnotist com AYC<br>Hollywood or Bust mus-com-c A  |
| - | 6   | 9   | Hollywood or Bust mus-com-c A   |
| _ | 1   | 3   | Hot Rod Rumble mel A Hot Shots com A  |
| - | 2   | 8   | Hot Shots   |
| _ | 7 8 | 6   | If All the Guys in the World dr AYC Incredible Shrinking Man,   |
| _ | 3   | 12  | The sci-fan AYC Iron Petticoat, The com-c A   |
| _ | 4   | 1   | Iron Sheriff, The   |
| - | 8   | 6   | Istanbulmys-mel-c A   |

| A'        | B      | C       |   | A      | B      | C      |   |
|-----------|--------|---------|---|--------|--------|--------|---|
| _         | 1      | 2       | Jail Busters cri-mel A                  | -      | 3      | 1      | Silken Affair, The (British)  |
| -         | 6      | -       | Joe Butterflywar-com-c A                | -      | 5      | 10     |   |
| -         | 3      | 2       | John and Julie (British) com AYC        | 1      | 7      | 2      | Smiley (Australian) dr-c AYC  |
| -         | 4      | 2       | Johnny Tremain kist-c AYC               | 1      | 7      | 3      | Something of Value mel A  |
|           | 6      | ~       |   | 8      |        |        | Spirit of St. Louis, The biog-c AYC   |
| -         | 8      | 2       | Kelly and Me mus-com-c AYC              | -      | 3      | 8      | Spring Reunion  |
| -         | 3      | 1       | Kettles on Old MacDonald's              | -      | 4      | 4      | Storm Rider, The wes AVC  |
|           | 2      | 12      | Farm, The                               | -      | 7      | 11     | Strange One, Thesoc-dr A  |
| -         | 3      | 13      | King and Four Queens, The wes-c A       |        |        |        |   |
| 200       | 3      |         | King of the Coral Sea                   | -      | 6      | 2      | Tall T, The wes-c A   |
|           | 7      | 3       | (Australian)mel AYC                     |        | 7      | 4      | Tarzan and the Lost Safari  |
|           | ,      | 3       | Kronossci AYC                           |        |        |        | (British)adv-c AYC  |
| _         | 9      | 3       | La Sorcière (French)                    | -      | 7      | 8      | Tattered Dress, The cri-mel A   |
| -         | 4      | 5       | Last Man to Hang, The                   | -      | 10     | 3      | Tears for Simon (British). cri-mel-c AYC  |
|           |        |         | (British) cri-mel A                     |        | -      | 5      | Tel Aviv Taxi (Israeli)   |
| -         | 8      | -       | Last of the Badmen wes-c AYC            | -      | 2      | 2      | Tempest in the Flesh (French) dr A  |
| -         | 2      | 3       | Let's Be Happy (British) mus-com-c AYC  | _      | 8      | 8      | Ten Thousand Bedrooms.mus-com-c AYC   |
|           | 2      | 1       | Life and Music of Verdi, The            | 2      | 5      | 3      | This Could be the Night mus-com A   |
|           |        |         | (Italian)mus-dr-c A                     | 3      | 4      | 9      | Three Brave Men propaganda-dr A   |
| -         | 4      | 9       | Little Hut, The                         | -      | 9      | 4      | Three Violent Peoplewes-c A   |
| -         | 4      | 8       | Living Idol, Theadv-c A                 | -      | 2      | 2      | Thunder Over Arizona wes-c AYC  |
| -         | 4      | 14      | Lizziedr A                              | -      | 3      | 3      | Tomahawk Trail  |
| -         | 2      | 2       | Lizzie                                  | -      | 10     | 8      | Top Secret Affair   |
| 3         | 9      | 3       | Lost Continent, The (Italian) trav-c A  | -      | 7      | 10     | True Story of Jesse James, The . wes-c A  |
|           | _      |         |   | 4      | 11     | 1      | 12 Angry Mendr A  |
| -         | 7      | 6       | Man Afraid cri-mel AYC                  |        |        |        |   |
| -         | ****** | 3       | Man Beastsci-mel A                      | _      | 1      | 4      | Undead, The fan A   |
| -         | 1      | 8       | Man in the Vaultmys-mel A               | _      | 3      | 7      | Untamed Youth mus-mel A   |
| -         | 1      | 3       | Man is Armed, The cri-mel A             | _      | 4      | 7      | Utah Blainewes A  |
| -         | 1      | 10      | Man Who Turned to Stone,                |        | -      |        |   |
|           |        |         | The                                     | 1      | 4      | 6      | Vintage dr-c A  |
| 1         | 11     | 6       | Men in Warwar-dr A                      |        | 4      | 9      | Voodoo Island   |
| -         | 7      | 6       | Mister Cory mel-c A                     |        |        | 6      | Voodoo Island   |
| -         | 3      | 2       | Monkey on My Backbiog A                 |        |        | 0      | Voodoo Woman mel A  |
|           | **     |         | N. I. A.D                               |        |        |        |   |
| -         | 11     | 1       | Naked Eye, Thedoc-e A                   | -      |        | 3      | Walk the Dark Street mel A  |
| -         | 5      | 1       | Naked Paradise mys-mel-c A              | -      | 4      | 1      | War Drums mel-c AYC   |
| -         | 2      | 4       | Nana (French)dr-c A                     | -      | 4      | 5      | Way to the Gold, The  |
| -         | 4      | -       | Night Passage wes-c A                   | 2      | 3      | 5      | We Are All Murderers (French) dr A  |
| -         | 1      | 8       | Night Runner, The cri-dr A              | -      | 9      | 3      | Westward Ho the Wagons wes-c AYC  |
| -         | 9      | 6       | Nightfall mys-mel A                     | desire | 4      | 6      | Wicked as They Come (British) dr A  |
| -         | 4      | ******* | Not of this Earth                       | 2      | 9      | 7      | Wings of Engles, The war-dr-c AYC   |
|           | 0      |         | Onde (Person Comment)                   | -      | 1      | 2      | Winner's Circle (French)dr A  |
| 1         | 2      | 6       | Oasis (French-German)adv-c A            | -      | 4      | 9      | Woman's Devotion, A mys-mel-c A   |
|           | 11     | 2       | Oedipus Rexdr-c A                       | -      | -      | 8      | Women of Pitcairn Island mel A  |
|           | 4      | 3       | Oh, Men! Oh, Women! mus-com-c A         | 1      | 7      | 6      | Written on the Wind dr-c A  |
|           | 5      | 2       | Oklahoman, The wes-c AY                 | 1      | 9      | 7      | Wrong Man, The mys-mel AY   |
| _         | 3      | 2       | On the Bowery , doc A                   |        |        |        |   |
| -         | 5      | 5       | Pantaloons (French)                     | -      | 2      | 2      | X the Unknown (British) mel AYC   |
| _         | 1      | 13      | Paris Does Strange Things               |        |        |        |   |
|           |        | ***     | (French)                                | _      | _      | 3      | Yellowneckmel-c A   |
| _         | 3      | 5       | Phantom Stagecoach, The wes AYC         | 2      | 14     | 1      | Young Stranger, The dr AYC  |
| -         | 3      | 1       | Prince and the Show Girl, Thecom-c A    |        | 1.4    |        | roung Stranger, The ar Arc  |
| 1         | 6      | 2       | Public Pigeon No. 1com-c AYC            |        |        | 10     | Zarak   |
|           |        | -       | Tubile Figeon 140. 1                    | -      | 5      | 10     | Zarak mel-c A Zombies of Mora-Tau fan A   |
| -         | 6      | 4       | Quiet Gun, The wes A                    | 2000   | 3      | 7      |   |
|           |        |         |   |        |        |        |   |
| 5         | 9      | 4       | Rainmaker, Thedr-c A                    | Rei    | saue   | s (ol  | dtimers you may have seen before) as previ-   |
| Married . | 5      | 1       | Raising a Riot (British)com-c AYC       | ous    | ly rat | ted in | n the Bulletin indicated:   |
| 2         | 7      | 5       | Reach for the Sky (British). war-dr AYC | -      | 6      | 10     | Bright Leaf (Jan. '51)  |
| 6         | 6      | -       | Red Balloon, The (French) fan-c AYC     | 9      | 9      | -      | Cinderella (July '50) mus-car-c AYC   |
| -         | 5      | -       | Restless Breed, The wes-c A             | 7      | 4      | 3      | East of Eden (Sept. '55)dr-c A  |
| -         | 6      | 2       | Revolt at Fort Laramie wes-c AYC        | 9      | 7      | 3      | Cinderella (July '50) mus-car-c AYC<br>East of Eden (Sept. '55) dr-c A<br>For Whom the Bell Tolls |
| -         | 4      | 6       | Ride Back, The mel-c A                  |        |        |        | (Feb. '44) mar-dr-c A   |
| -         | 1      | 9       | Ride the High Irondr A                  | 5      | 11     | 1      | Gaslight (Feb. '45) mys-mel A   |
| -         | 3      | 11      | River's Edge, The cri-mel-c A           | 1      | 4      | 10     | Green Dolphin Street (June '48) dr AY   |
| -         | 3      | 5       | Rock, Rock, Rock mus-com AYC            | 5      | 11     | 1      | Jim Thorpe-All American   |
| -         | 4      | 7       | Royal Affairs in Versailles             |        |        |        | (Jan. '52) biog A   |
|           |        |         | (French)                                | -      | 1      | 7      | 1,000 Years from Now (Captive   |
| plant     | 2      | 4       | Runaway Daughtersdr A                   |        |        |        | Women, May '53) sci A   |
|           |        |         |   | -      | 5      | 12     | Postman Always Rings Twice,   |
| -         | 2      | 3       | Saint Joandr A                          |        |        |        | The (Oct. '46)  |
| -         | 2      | 3       | Scandal, Inc                            | 4      | 8      | 4      | Strangers on a Train (Jan. '52) cri-mel A   |
| -         | 8      | 2       | Shadow on the Window, The cri-mel A     | _      | 10     | 4      | West Point Story, The   |
| -         | 1      | 4       | Shake, Rattle and Rock mus-dr AY        |        |        |        | (June '51)  |
| -         | 2      | 5       | She Devilsci A                          | 1      | 10     | 5      | Winning Team, The (Jan. '53) biog AYC   |
| _         | 6      | 2       | Shoot-Out at Medicine Bendwes AYC       | î      | 10     | 5      | Young Man with a Horn   |
| -         | 4      | 3       | Sierra Stranger wes A                   |        |        | -      | (Sept '50)mus dr A  |
|           |        |         |   |        |        |        |   |

# Phonograph Records

#### BY WALTER F. GRUENINGER

Please Note: The first symbol applies to quality of interpretation, the second to fidelity of recording.

Berlioz Overtures. Philharmonic Promenade Orchestra under Boult. Westminster W LAB 7051. \$7.50. "Roman Carnival," "The Corsair," "Rob Roy." Dramatic, showy pieces that strain the virtuosity of this group, though they play with vitality. Well recorded, but only 27 minutes of music on the disk. A AA

but only 27 minutes of music on the disk. A AA Fleld: Piano Concerto No. I and Five Nocturnes. Sondra Bianca (piano) with the Philharmonia Orchestra of Hamburg under J. Randolph Jones. MGM E 3476. \$3.98. John Field has gotten less than his due as an innovator because Chopin and Liszt composed in somewhat the same vein and were his more gifted contemporaries. Yet, it is good to have these works on LP, particularly the Five Nocturnes. Acceptably played and recorded. A A

Nocturnes: Acceptably played and recorded. A Gottschalk: Piano Music. Jeanne Behrend (piano). MGM E 3370. \$3.98. Fifty years ago these pieces by the American, Gottschalk, were used in teaching. Today some music lovers will consider them "corny." Here are 10 of them, well played and recorded from "The Banjo," "The Last Hope," "Souvenir de Porto Rico" to "The Union," "Bamboula," and "Serenade." AA A Marketis D. Wales & Toch. Third San

Hindemith: Mathis Der Maler & Toch: Third Symphony. Pittsburgh Symphony under Steinberg. Capitol P 8364. \$3.98. Mathis begins to look like Hindemith's most popular work. The Toch, awarded a Pulitzer prize in 1956, is a first recording. One could hardly ask for more suavity, drama and virtuosity than Steinberg musters. Superbly recorded.

musters. Superbly recorded.

Kodály: Hary Janos Suite & Bartók: Hungarian Sketches and Roumanian Dances. Minneapolis Symphony under Dorati. Mercury MG 50132. \$3.98. The lusty, enjoyable Suite comes from Kodály's opera which is heard far less often than the suite. The Bartók pieces stem from folk tunes. Altogether, a delightful orchestral record. The playing is much more sensitive than commonly heard in this music. Good recording.

AA. A

Mozart: Concerto No. 5 & Bach; Concerto No. 1.
Milstein (violin) with the Festival Orchestra under Blech.
Capitol P 8362. \$3.98. Fine concerti. The Mozart first
movement is rushed, losing all sense of delicacy, particularly with the heavy accompaniment. Never is there a
feeling of repose. Throughout the work Milstein slides
in a romantic manner unbecoming to Mozart. Bach
emerges better. But the record is one of the least successful efforts of a distinguished violinist. B AA

Mozart: Concerti Nos. 17 and 25. Serkin (piano) with the Columbia Symphony Orchestra under Szell. Columbia ML 5169. \$3.98. The music ranks high among Mozart's compositions for piano and orchestra. Serkin plays with authority and meticulous attention to detail. Sometimes he hums. Well supported by the orchestra. Satisfactorily recorded, with some echo.

AA A A Offenbach: La Vie Parisienne Highlights. Doria,

Offenbach: La Vie Paristenne Highlights. Doria, Moreno, etc., under Cariven. Epic LC 3344. \$3.98. A sprightly comic opera sung by a French group uneven in quality. Many of the tunes have been heard in the ballet so named. Expert conducting and recording. A AA

Prokofiev: Sonatas for Piana. Yury Boukoff (piano). Westminster XWN 18369/70/71. \$3.98 each. Fascinating, challenging sonatas (9) by a foremost composer of our time, who was also a marvelous pianist. The 34-year-old Boukoff, hailing from Sofia, has ample technique and unusual insight to bring off these difficult numbers

with everything but the greatest artistry. Clearly recorded.

Santa-Cruz: Suite for String Orchestra and Mendoza-Nava: Estampas Y Estampillas for Orchestra of Cellos. MGM Orchestra under Surinach. MGM E 3515. \$3.98. Santa-Cruz is a Chilean who composed this neo-romantic suite in 1937. Mendoza-Nava's piece is interesting chiefly as a suite for cellos alone, composed by a young Bolivian. Not great music (S-C's is the better) but off the beaten path. Both are well played and recorded, though a little dryly.

Hi-Fi Hi-Jinks with Strauss. Vienna State Opera Orchestra under Paulik. Vanguard SRV 104. \$1.98. Eight pieces hammered out in strict tempo and fairly well recorded with the percussion emphasized including "Tales from the Vienna Woods," "Persian" and "Radetzky," Marches, and "Roses from the South."

Marches, and "Roses from the South."

Tchaikovaky: Violin Concerto. Morini with the Philharmonic Symphony Orchestra of London under Rodzinski. Westminster XWN 18397. \$3.98. A concerto loved by every violinist because it is "grateful," popular. Somehow, Morini misses fire. Intonation is less than perfect and the feeling of the fast movements doesn't always meet expectations. Very well recorded with the violin prominent... Taking into consideration both performance and recording. I prefer the disks featuring Oistrakh on Decca 9755, Ricci on London LL. 172.

Vivaldi: Concerti 5, 6, 7, 8. I Musici with Ayo (violin). Epic LC 3343. \$3.98. Fine, early Italian works played with taste and technical mastery by this devoted group of instrumentalists. Spaciously recorded. AA AA Leibert Takes a Holiday. Westminster WP 6042. \$3.98.

Leibert Takes a Holiday. Westminster WP 6042. \$3.98. Dick Leibert plays the organ of the Byrd Theater in Richmond, Va. Included are "All the Things You Are," "Donkey Serenade," "Washington Post March," "Laura," and similar tunes . . . Equally good is his "Nightcap," Westminster WP 6039.

New Horizons: A Musical Guide to World Travel. Various Orchestras. Decca Dl. 8375. 83.98. A miscellaneous collection of popular light numbers which whet your appetite for Paris, Rome, Havana, Manhattan, Mexico, etc. Thus, Werner Muller and His Orchestra play "La Seine," Pepe Gonzales and His Orchestra play "El Cumbanchero," etc.

Vienness Night at the Permy H. W. AA A

Viennese Night at the Proms. Halle Orchestra under Barbirolli. Mercury MG 50124. \$3.98. The recording's a bit harsh, the playing's efficient, a little dry. Yet, it's different. There's a tendency to speed the tempi. Included are "Gypsy Baron" Overture, "Blue Danube" Waltz, "Radetzky" March, etc.

Memo to bargain hunters: Record clubs perform a service for those who prefer to have mail delivery rather than go to a store. The manufacture of records for clubs, however, is no nearer perfection than it is for standard brands; hence some will be defective. The artists and performance are rarely as good as the best of the individual labels. Moreover, the records are not priced as low as the standard brands advertised in the music section of the Sunday N. Y. Times by half a dozen shops that sell by mail. The Columbia and Victor clubs sell the same disks by mail as those offered in stores.

## The Consumers' Observation Post

(Continued from page 4)

AUTOMATION IN THE HOME will in time eliminate a goodly portion of present drudgery. Dr. Irma H. Gross of Michigan State University in the Journal of Home Economics points out that completely "push-button houses" may be a dream of the future, but there are many common applications of automation in the home, including heat-control devices, automatic washers, and dryers, that already have made a great contribution in reducing physical labor. She cautions against expecting too much from automation, which can never eliminate the need for lifting, carrying, and working with little children or assembling the many different items that go into the preparation of a meal or the keeping of household accounts. The homemaker of the future, however, will devote less time to physical production and more to acting as a manager whose task is to keep the home functioning smoothly.

OVERCHARGING A PURCHASER FOR A USED CAR was cause for a law suit in Cincinnati. An overtrusting purchaser signed blank papers for an automobile that was supposed to cost \$625, and she was promised a \$400 allowance on a trade-in, leaving a balance of \$225 to be financed. A few days after the papers had been signed, the local bank sent the purchaser a notice that she owed \$825 on the instalment contract she had signed. With carrying and interest charges, the amount owed for the car exceeded \$1000. In a suit brought against the used-car dealer, the jury trial held before Common Pleas Judge John M. Renner returned a \$500 verdict in favor of the plaintiff. This action represents a victory for an unwary consumer, but others who do not wish to go to the expense and trouble of a law suit should scrutinize any sales contract carefully and make certain that the terms are clearly spelled out before they sign it.

FOR THE HOME THAT IS ADEQUATELY WIRED to feed current to a wide variety of mechanical-electrical equipment, the current capacity of the service entrance wiring is but one of several factors to be considered. It is true that the wire size of the service entrance is customarily determined by the electrical load of the house, e.g., the number, type, and kind of appliances and the number of outlets in the house. The 1956 National Electrical Code, which gives a formula for calculating the size of the service entrance needed for a particular load, recommends a minimum capacity of 100 amperes for incoming residential wiring. One observing engineer reports that on the basis of a limited number of tests he has found that a large number of major appliances (as well as a sufficient number of branch circuits) can in practice be satisfactorily handled by a smaller service entrance than that called for by the National Electrical Code. It is his contention that the maximum load is seldom, if ever, reached since most of today's major appliances do a job quickly, require a large amount of energy for short periods only, and are not turned on simultaneously. He is of the opinion that the provisions of the Code should be more realistic in regard to the demand load figures applying to the various household appliances. such as ranges and dryers. If Code provisions were more in line with existing home needs, an enlarged service entrance to provide for an increasing number of household appliances with a sufficient number of branch circuits would not be necessary. From the standpoint of economy, this is an important suggestion that merits close study and further investigation by qualified authorities in the electrical code field. It may indicate that a service entrance of three-wire 120/240 volt service with a minimum capacity of 60, or at most 100, amperes will be sufficient for sustaining most household needs for electricity. Money to be spent for better electrical living should perhaps be applied for increasing the number of convenience outlets and adding branch circuits of proper size for major appliances.

FROZEN CONCENTRATED ORANGE JUICE must be kept at the proper storage temperature at all times or it will deteriorate in flavor. In a test made by the United States Department of Agriculture last spring of some 1400 samples, nearly all showed varying degrees of deterioration. Although about 80 percent were still rated Grade A, the test panel found that in most of the samples flavor was not as pleasant as when it was originally sampled at the time of production. The director of this study commented that the evidence indicated that Florida frozen orange juice does not receive proper handling required for a frozen product after it leaves the warehouses.

PREDICTIONS OF WHAT IS TO COME in appliances has been the topic of a number of speeches this past spring. According to C. K. Rieger, Vice-President of General Electric Company, there is no prospect of a master control where a button can be pushed, a few instructions left and, when the homemaker returns, the evening meal will appear on the dinner table. Mr. Rieger does foresee better stoves and ovens that are easier to keep clean and are more effective in heat utilization. Most kitchens will have dishwashers and waste-disposal units; and refrigerators will have a third compartment, in addition to freezing, that will keep fresh fruits and vegetables for a longer time. Other appliance manufacturers foresee an increased use of plastics as soon as consumers get over their distrust occasioned by unhappy experiences with the cheap novelties that have lacked durability. Refrigerators, automatic washers, and other appliances could be encased in plastic cabinets that will not mar, will be durable, easy to manufacture, hence cheaper, and light in weight so that they can be hung on a kitchen wall at convenient "reach" height, if the public could be persuaded that plastics are as good as if not superior to their metal counterparts.

SOMETHING NEW IN A MILK CONCENTRATE has made its appearance. The Pure Milk Association of Kansasville, Kansas, manufactures it by evaporating two thirds of the water out of Grade A milk and packs the concentrate in one—third-quart containers. The homemaker simply adds two thirds of a quart of water and puts the reconstituted milk into the refrigerator. It is claimed that, even when chlorine—treated water is used to dilute the concentrate, the resulting product tastes like milk. The only exception to good flavor occurs when water with a sulfur taste is used. The reconstituted milk is reported to keep longer in an ordinary refrigerator without souring than regular pasteurized or homogenized milk.

THE HIGH COST OF LIVING is a subject of great interest to the National Board of Fire Underwriters and likewise to every householder. The Board points out that it is essential for families to have a written inventory of important household possessions with an estimate of the value as evidence for making claims in the event of loss by fire, theft, or destruction. It is sometimes more convenient to take a photograph of each room than to list the various important objects of value.

ALLERGY IS A SERIOUS PROBLEM with human beings, and it ranks first among chronic ailments in children. The symptoms include sneezing, stuffiness, running nose, itching throat and eyes, eczema, hives, nausea, abdominal pains, indigestion, constipation, and diarrhea. Pollens, dust, common everyday foods such as egg, wheat, and milk are responsible for most persistent chronic symptoms. Nuts, fruits, and shellfish also cause acute distress. In a simple little booklet entitled "Allergy in Children," an excellent analysis of the problem, what the symptoms are, how to recognize them, and what commonsense precautions to take are set forth that will be very useful to mothers whose children are prone to sensitivity. It is available at 25 cents from The American Foundation for Allergic Diseases, Inc., 274 Madison Ave., New York 16.





## Be careful with spray cans!

SPRAY CANS, called aerosol dispensers in the trade, are used for packaging hundreds of different kinds of products nowadays.

The cans provide a ready and convenient means for using many of the chemical specialities which are packaged in them, and it is no wonder that they are becoming increasingly popular. Like most of the newer things we use, however, they present their problems. Almost every can carries a warning somewhere that the container should be kept below 100, 110, or 120°F, away from heat, and out of the sun (to avoid explosion).

There are other important admonitions: do not puncture aerosol cans, drop them or subject them to shock or extreme cold, and above all don't throw an aerosol can into a fire or an incinerator. One death was reported of a man in Ohio whose leg was cut and an artery severed when he was burning trash in the yard of his home and threw a shaving cream spray can in with other discarded items.

Unfortunately, the warning is often buried in type at the end of other directions.

It goes without saying that care should be taken to know just where the tiny spray orifice is. Some of the containers have arrows on the top of the push buttons to indicate the direction of the spray. Unfortunately, these are often far from being clearly and conspicuously marked, and until one has started to spray the product, it is not always easy to tell on which side the hole is (especially a problem for a person who uses glasses but may not wear them at all times). Some manufacturers have taken this difficulty into account and have made the spray orifice of a color different from the rest of the cap, but there is still a good deal of improvement needed to make sure that one gets that spray started in the intended direction.

Obvious as this hazard might seem to be, it is nevertheless a real one, for a good many people, no doubt, push the button first and think afterwards about where the spray is going a mistake that almost anyone could make. Early this year an unfortunate accident was reported from a city in Florida. A mother, holding a three-weeks-old baby boy in her lap, was cleaning a bottle warmer with a rust-removing chemical dispensed from a spray can. She pressed the button on the container, but the liquid shot out in the wrong direction and sprayed into the baby's mouth. The child later died. It is doubtful if any manufacturer should be permitted to package in spray cans any material so toxic as the liquid involved in this instance.



## Combination grills-waffle irons

We are now testing a group of eleven grills and waffle irons for convenience, ease of handling, and effectiveness in use.

Evenness of cooking and browning is given special consideration in rating the appliances.

Measurements are also being made to determine safety against shock to the user as well as temperatures of handles and other parts which are likely to cause burns in case of actual skin contact.

## CONSUMER BULLETIN

WASHINGTON, NEW JERSEY

